P001 AZD5153 enhances the apoptotic effects of gemcitabine on human pancreatic cancer cells via AKT/mTORC1/S6 signaling

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Abstract - Introduction
Pancreatic cancer is a malignant cancer with a poor prognosis. Gemcitabine (GEM), the first-line treatment drug, shows limited efficacy because of the notorious drug resistance of pancreatic cancer. Therefore, the development of sensitive drugs for pancreatic cancer is essential.

Abstract - Material and method
AZD5153 is a novel bivalent BET bromodomain inhibitor with multiple antitumor effects on malignancy. Here, we investigated the effect of AZD5153 on the GEM sensitivity of human pancreatic cancer cells in vitro and in vivo and the potential mechanism involved for the first time. Human BXPC3 and PANC-1 cell lines were treated with AZD5153, and cell viability was assessed with a sulforhodamine B (SRB) assay. Cell clone formation was observed after treatment with AZD5153 and/or GEM by conducting a clone formation assay. Cell apoptosis was measured using flow cytometry. Protein levels was analyzed

Abstract - Results and discussion
AZD5153 inhibited the proliferation of pancreatic cancer cells. AZD5153 enhanced the effect of GEM, with mean CI values below 0.5. AZD5153 combined with GEM induced cell apoptosis. Further investigations revealed that the combination of AZD5153 and GEM decreased the phosphorylation of AKT/mTORC1/S6 signaling proteins without decreasing BRD4 expression. The in vivo study also confirmed the antitumor effect.

Abstract - Conclusion
In conclusion, these results suggested that AZD5153 might be an excellent GEM sensitizer in pancreatic cancer.

P002 Successful introduction of a point mutation into the genome of a primary colon cancer cell line using CRISPR base editing technology

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Abstract - Introduction
Novel CRISPR/Cas9 genome base editing technology is a powerful DNA editing tool. Many efforts have been made to investigate the editing efficiency of CRISPR base editing system. However, high editing efficiency of 90% has to date only been shown using a transient expression of base editors. Moreover, stable expression of the base editor in established cell lines showed editing efficiency up to 60%. Nevertheless, the editing efficiency of stably expressed base editors in primary tumor cell lines is not well studied due to lentivirus packaging limitations and the low transduction efficiency.

Abstract - Material and method
Here, we generated a lentiviral adenine base editor vector that has a flexible NGN PAM recognition site. To study the editing efficiency of the lentiviral base editor system, we have used PCR mutagenesis method to develop a GFPstop reporter gene which was subsequently introduced into the genome of the primary cell line. Moreover, we have used a 50x concentrated lentivirus for the delivery of the adenine base editor. Furthermore, we compared the editing efficiencies of a non-inducible single guide RNA (sgRNA) expression vector and an inducible sgRNA at different time points.

Abstract - Results and discussion
We found a highly stable expression of the adenine base editor in a primary colon cancer cell line. In addition, the adenine base editor successfully modified the endogenous GFPstop transgene to reverses the stop codon into glutamine (TAG>CAG). Flow cytometry detected 15% GFP positive cells following base editing using non-induced sgRNA three days after transduction and up to 5% GFP positive cells were found using an inducible sgRNA after three days of induction with doxycycline. In order to investigate the ability of the adenine base editor to target an endogenous gene, we targeted KRAS codon 61. Adenine base editor successfully introduced KRAS Q61R mutation CAA>CGA. We were able to detect 1.5% allele frequency for the KRAS Q61R mutated allele using droplet digital PCR. Sanger sequencing confirmed the introduction of KRAS Q61R point mutation.

Abstract - Conclusion
Our study demonstrates the efficient introduction of a point mutation in the genome of primary colon cancer cell line with stable expressed base editor. High virus concentration and the use of a non-inducible sgRNA vector are potential important parameters for efficient editing. This strategy should be useful to study the biology of oncogenic mutations under the control of its endogenous promoter.

P003 Synthesis of a versatile mitochondria-targeting small molecule for cancer near-infrared fluorescent imaging and radio/photodynamic/photothermal synergistic therapies

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Abstract - Introduction
RT is one of the most routinely used therapeutic modalities for cancer patients, and >75% of non-small cell lung cancer (NSCLC) patients have received this treatment. Although as a mainstay modal for cancer treatment, the clinical effect of radiotherapy (RT) does not yet meet the need of cancer patients. Developing tumour-preferential radiosensitizers or combining RT with other treatments has been acknowledged highly necessary to enhance the efficacy of RT.

Abstract - Material and method
The present study reported a multifunctional bioactive small-molecule (designated as IR-83) simultaneously exhibiting tumour-preferential accumulation, near-infrared imaging and radio/photodynamic/photothermal therapeutic effects. IR-83 was designed and synthesized by introducing 2-nitroimidazole as a radiosensitizer into the framework of heptamethine cyanine dyes inherently with tumour-targeting and photosensitizing effects.

Abstract - Results and discussion
IR-83 preferentially accumulated in tumours, suppressed tumour growth and metastasis by integrating radio/photodynamic/ photothermal multimodal therapies. Mechanism studies showed that IR-83 accumulated in cancer cell mitochondria, induced excessive reactive oxygen species (ROS), and generated high heat after laser irradiation. On one hand, these phenomena led to mitochondrial dysfunction and a sharp decline in oxidative phosphorylation to lessen tissue oxygen consumption. On the other hand, excessive ROS in mitochondria destroyed the balance of antioxidants and oxidative stress balance by down-regulating the intracellular antioxidant system, and subsequently sensitized ionizing radiation-generated irreversible DNA double-strand breaks.

Abstract - Conclusion
This is the first report of a therapeutic small molecule integrating RT/PDT/PTT triple treatment by targeting cancer cell mitochondria, which might present a practica-ble strategy to develop small-molecule-based cancer theranostic agents for simultaneous cancer tar-geting, imaging and therapy.

P004 Simple Approach to Enhance Green Tea Epigallocatechin Gallate Stability in Aqueous Solutions and it Bioavailability: Experimental and Theoretical Approaches

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Abstract - Introduction
Epigallocatechin gallate (EGCG), by far the most abundant of green tea catechin polyphenols, has been recognized for its antioxidant and antiproliferative effects. EGCG may be used to reduce oxidative damage to lipids, proteins, and DNA or to prevent tumor progression. However, because of its high instability, relative low solubility in water, low intestinal permeability, and short plasma half-life, EGCG exhibits poor biopharmaceutical properties, with very low bioavailability, thus resulting in plasma levels up to 50 times less than those needed to exert its pharmacological actions.

Abstract - Material and method
To meet the needs of a large-scale clinical trial requiring EGCG in a concentrated solution to anticipate swallowing impairments, we developed an EGCG-based aqueous sucrose solution plus citric acid in the simplest way while trying to circumvent EGCG instability. The solution was thoroughly characterized to sort out the unexpected solubility and stability outcome by combining experimental (HPLC-UV-mass spectrometry and infrared spectroscopy FTIR) plus computational approaches (density functional theory; DFT) to achieve structural analysis and solvatation energy calculus of possible complexes.

Abstract - Results and discussion
EGCG without sucrose but in the presence of the other excipients (citric acid) is soluble up to a concentration of about 4.6 mg
.mL-1 at 25°C. In the formulation, an EGCG concentration of 26.7 mg.mL-1 was obtained at 25°C (x 6). Very interestingly, the formulated solution was shown to be stable up to at least 24 months under 2–8°C and at ambient temperature. An equimolar blend of EGCG and sucrose shows the presence of broad absorption O-H stretch IR regions and no O-H free stretch peaks is noticed. MS analysis shows an ion imputable to the equimolecular EGCG–sucrose complex ([EGCG + SUC -H]-; m/z = 799. These results suggest that EGCG and sucrose form a complex where H-bonding is involved, also suggested by molécular energy studies (solvatation energy lower for complex). Furthermore, considerable improvement in bioavailability in rats, against EGCG powder in capsules, was shown after gavage. Cmax (302.4 ng.mL-1) and AUCt (497 ng.mL-1.h) are about 38 and 15 higher than the powder.

Abstract - Conclusion
Our new formulation greatly enhances the solubility and the bioavailability of epigallocatechin gallate. The proposed formulation is also stable at least up to 24 months. Taking together, these dramatic improvements in EGCG physico-chemical characteristics should permit the development of appropriate clinical studies to confirm the promising in vitro antineoplastic properties of this molecule.

P005 Impact of type I collagen remodeling during aging on the response to vemurafenib in BRAFV600E melanoma cells

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Abstract - Introduction
Targeted therapies against BRAFV600E melanoma often face to resistance. Among all the resistance mechanisms described, type I collagen, the major component of the tumor extracellular matrix, play a crucial role in this resistance. Alteration of its mechanical properties affects its organization and mechanical properties and may lead to the overexpression of the Yes-Associated Protein (YAP), a mechanical sensor of the microenvironment. Here we explored the impact of age-related remodeling of type I collagen on the sensitivity of BRAFV600E melanoma cells to vemurafenib.

Abstract - Material and method
This preclinical study was performed on different BRAFV600E mutated melanoma cells lines (1205lu, A375, SKMEL28). The cells were cultured in type I collagen 3D matrices derived from 2-months-old (adult) and 24-months-old (old) Wistar rat tails tendons. The 3D matrices were characterized by second harmonic generation (SHG) and reflection microscopy. Cell growth and cell sensitivity to vemurafenib were determined by phase contrast microscopy. Apoptosis was evaluated by flow cytometry. Finally, YAP protein expression was analyzed by Western blot.

Abstract - Results and discussion
Characterization of the structural organization of collagen fibers during aging showed a decrease in fiber length and diameter, and an increase in fiber straightness. At the cellular level collagen aging induced an increase of 1205Lu cell growth, had no impact on SKMEL28 and decreased A375 cell growth. In accordance with a study showing a decrease of NSCLC cells sensitivity to EGFR inhibitors with collagen aging, old collagen induced a decrease of 1205Lu and SKMEL28 cells sensitivity to vemurafenib but has no effect on A375 cells. This was associated with an age-related significant increase of YAP protein expression in 1205Lu but not in A375. Interestingly, YAP expression was increased in the presence of vemurafenib. YAP being described as a stiffness sensor and resistance factor in various cancers, suggesting that type I collagen aging may confer resistance to vemurafenib to a particular group of melanoma cells via YAP overexpression, and that vemurafenib impacts the microenvironment.

Abstract - Conclusion
The impact of aging on cancer response to therapy is poorly studied. This preclinical study, show that changes in type I collagen during aging affect differentially the sensitivity of melanoma cells to vemurafenib cytotoxicity. While this may suggest that the age of BRAFV600E melanoma patients could impact treatment response, YAP protein appears to be a potential therapeutic target to consider.

P006 Prevalence and Risk factors associated with the use of complementary and alternative medicines in Tunisian cancer patients at Salah Azaiz Institute

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Abstract - Introduction
Alternative and complementary medicines (ACM) is defined as any non-allopathic medicine substance or technique used to improve health and quality of life.The use of these remedies has evidentlyincreased since the last three decades in all pathologiesespecially in cancer. The use of ACM could expose cancer patients to many toxicities and drug interactions with chemotherapy treatments. The purpose of this study was to determine the prevalence of ACM use and the risk factors associated with the use of ACM.

Abstract - Material and method
This is a cross-sectional study including cancer patients receiving chemotherapy at Salah AzaizInstitute from September to October 2021. Patients included in the study met the following criteria; they had to be 18 years of age and above, diagnosed of cancer and referred to Salah Azaiz hospital.The data collection was done through a questionnaire. Analyses were conducted using the Statistical Package for Social Sciences(SPSS) program, version21.

Abstract - Results and discussion
Among 250 patients interviewed, 42.4% (N=106) used ACM. Women used ACM morethan men (76.8% versus 23.3%). The most ACM category usedwas herbal medicine (95.28%), followed by specific diet (66%), dietary supplements use represents 21.7% , use of animal products represents 34.9% and spiritual therapies was 17% . The most common plants used wereNigella sativa (20.75%), Turmeric longa (18.86%) and Ephedra foeminea(17.92%) The univariate descriptive analysis showed sex, educational level, socioeconomic level, geographical origin and clinical data did not have a significant association with the use of these remedies ($p>0.05$).Only age was significantly associated with ACM use ($p=0.043$). Multivariate analysisdemonstrated that the age (≤ 65) was a risk factor of ACM use (adjusted OR=2.264; IC95 %[1.01-5.08]; $p=0.047$).Similarly, breast cancer was a risk factor associated with ACM use (adjusted OR=4.800;IC95 % [0.86-26.78]; $p=0.074$).

Abstract - Conclusion
This study revealed that ACM use was prevalent among Tunisian cancer patients.Patients under the age of 65 and those with breast cancer were risk factors of ACM use. Thus,oncologist and pharmacist must frequently ask patients about eventual ACM use in order to provide them relevant information to avoid toxicities and drug interactions related to their use.

P007 Management of buccopharyngeal mucositis induced by anticancer drugs at the Salah Azaiz institute

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Abstract - Introduction
Oral mucositis is a common side effect of non-surgical head and neck cancer treatments: chemotherapy and radiation therapy. The aim of this study was to investigate the prevention and management of buccopharyngeal mucositis induced by chemotherapy and/or radiotherapy.

Abstract - Material and method
This is a cross-sectional, descriptive, and observational study which was conducted in the medical oncology departments at the institute of Salah Azaiz, over five months, from April to August 2021. A questionnaire was administered indirectly to all adult patients over the age of 18 who had developed mucositis, whatever the grade, after cancer treatment. The data processing was performed on the computer software SPSS.

Abstract - Results and discussion
15 patients were included. The mean age was 49.2 ± 16.2, with a male/female sex ratio equal to 1.5. 53% of patients were treated with chemotherapy alone and 47% of them were treated with concomitant radiotherapy and chemotherapy.
All patients had risk factors for mucositis: 47% smoked, 27% had poor oral health, 13% had a history of cancer treatment (chemotherapy and/or radiotherapy) and 13% had diabetes. The patients developed mucositis at varying grades: grade 1 (40%), grade 2 (20%), grade 3 (13%) and grade 4 (27%). 67% of patients reported that this toxicity appeared from the first course of treatment. 80% of them suffered from associated oral pain, with variable intensity. Mucositis influenced cancer treatment in 20% of patients and diet in 67% of patients. 47% of patients had suffered from malnutrition and/or weight loss. 20% of patients (n=3) have been informed about the possibility of developing mucositis following cancer treatment. They had taken preventive measures: one patient had oral hygiene, one patient followed a diet, and another quit smoking. The most used treatments were nystatin mouthwashes (35% of cases) and sodium bicarbonate mouthwashes (28% of cases). 34% of patients used natural treatment, namely honey for 20% of them.

Abstract - Conclusion
Anti-cancer treatment should be accompanied by preventive measures and management of side effects, in particular mucositis, which is a frequent and troublesome effect.

P008 Containment assessment of five commercially available closed system transfer devices (CSTDs) using the 2016 draft NIOSH performance protocol and 2.5% v/v 2-Phenoxyethanol (2-POE) as challenge agent

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Abstract - Introduction
In 2016 CDC NIOSH published a draft test protocol using automated thermal desorption-gas chromatography-mass spectrometry (ATD-GC-MS) to assess the containment performance of CSTDs. This study reports the containment performance of three barrier and two air-cleaning CSTDs (n=4) according to the 2016 draft NIOSH Tasks 1 and 2 using 2.5% v/v 2-POE as the challenge agent. The objectives were to compare containment between both physical barrier & air-cleaning CSTDs and to compare containment between two different air-cleaning CSTDs namely ChemoLock™ and Tevadaptor™.

Abstract - Material and method
PhaSeal, Equashield, ChemoLock™ barrier, ChemoLock™ air-cleaning & Tevadaptor™ CSTDs were tested by 2016 NIOSH Tasks 1 & 2 (n=4). 100 mL empty IV bag, CH-10 ChemoClave bag spike & IV administration set added to Task 2. Blank/test air sample collection 30 mins (100mL/min) on Tenax TA tubes (n=2). D8-toluene internal standard added prior to analysis. Analysis using Chromeleon v7.3 in SIM mode. Blank tubes (n=85) used for limits of detection (LOD) and quantitation (LOQ). Negative controls:Tasks 1 & 2 (n=1) used MilliQ water. Positive controls were performed at release volumes: 5 & 10 microlitres.

Abstract - Results and discussion
The experimental limit of detection (LOD) and lower limit of quantitation (LLOQ) for 2-POE were determined as 0.16±0.01 ppb and 0.41±0.01 ppb respectively. The needle and syringe (positive control) tests produced vapour concentrations of 3.13 ppb & 6.59 ppb for the 5 & 10 microlitre releases of 2-POE respectively, thus demonstrating system suitability. The average system blank (n=85) gave a 2-POE vapour concentration of 0.05±0.01 ppb demonstrating low backgrounds between testing. All CSTDs tested: PhaSeal™, Equashield™, ChemoLock™ barrier, ChemoLock™ air-cleaning & Tevadaptor™ gave <LOQ releases for both NIOSH Tasks 1 & 2. The findings demonstrate that there was no statistically significant difference in containment performance between the three physical barrier and two air-cleaning CSTDs evaluated in the study. Furthermore, there was found to be no statistically significant difference in containment performance between the two different air-cleaning CSTDs evaluated in the study.

Abstract - Conclusion
Positive controls 5 & 10 microlitres 2.5% v/v 2-POE generated 2-POE concentrations of 3.13 ppb & 6.59 ppb respectively, thus demonstrating system suitability. PhaSeal™, Equashield™, ChemoLock™ barrier, ChemoLock™ air-cleaning & Tevadaptor™ CSTDs gave <LOQ(0.41±0.01ppb) for both NIOSH Tasks, demonstrating containment. No difference in performance was observed between barrier and air-cleaning CSTDs.

P009 Impact of the 2019 coronavirus pandemic on cancer treatment in the Calabria Region, Italy

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Abstract - Introduction
The 2019 coronavirus (COVID-19) pandemic, caused by severe acute respiratory syndrome coronavirus 2, has had inevitable and serious consequences for the number of cancer treatments initiated for patients without COVID-19. To assess the impact of this pandemic on cancer care, a regional survey of cancer patients was conducted. The purpose of this work is to carry out a drug use analysis and therefore an evaluation of the cancer treatments initiated in the Calabria region in the years of full pandemic 2020-2021.

Abstract - Material and method
The work was conducted using the data of the pharmaceutical flows of the AIFA Monitoring Registers comparing the year 2019, considered the reference year for the number of oncological treatments started and treatments closed, with the years 2020-2021, years of comparison, characterized by pandemic. Analyzes relating to the number of treatments started and the number of treatments closed were made.

Abstract - Results and discussion
In the reference year 2019, in the Calabria Region, 1,600 treatments with oncological drugs subjected to AIFA monitoring were started and 949 treatments were closed. In the year 2020, the treatments started with cancer drugs were 1392 and 702 treatments closed, while in the year 2021, the treatments started with cancer drugs were 1371 and 342 closed. The percentage of reduction compared to the year 2019, considered the reference year for the analysis of the cancer treatments started and the treatments closed, was respectively -14.3% and -63.9%. These data demonstrate the significant impact of the COVID-19 crisis on cancer care, indicating a significant reduction in treatments initiated and closed during this pandemic. In the near future, it will be a challenge to reorganize cancer treatments while addressing the COVID-19 pandemic and to see the progress of treatments to improve survival and quality of life of cancer patients.

Abstract - Conclusion
The present work investigates the prospects of cancer patients during the COVID-19 pandemic in the Calabria Region. The evaluation and processing of the number of oncological treatments made it possible to observe the "real world" of oncological treatments in sharp reduction in 2020-2021 compared to 2019, a serious consequence on survival and mortality for these patients.

P010 TAS-102 WITH OR WITHOUT BEVACIZUMAB IN METASTATIC COLORECTAL CANCER

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Abstract - Introduction
TAS-102 (trifluridin/tipiracil) is an oral antitumor drug for patients with metastatic colorectal cancer (mCRC) refractory to standard therapies, including fluoropyrimidines, oxaliplatin and irinotecan. The combination of TAS-102 plus bevacizumab has showed a benefit in overall and progression-free survival compared to TAS-102 monotherapy. This combination is not approved by the European Medicines Agency (EMA) but some clinical guidelines recommend it. We present the data of the patients treated in our hospital with this combination compared with patients treated with TAS-102 in monotherapy.

Abstract - Material and method
The study subjects were patients who received TAS-102 with or without bevacizumab from January 1, 2021 to March 31, 2022. We selected this period because the combination was used first in our hospital at summer of 2021. We evaluated the time to progression (TTP) for both groups and the time of treatment (TOT) for combination group too, because a great percentage of patients did not progress at cut-off date yet. We also reviewed adverse events of grade ≥ 3 according to the Common Terminology Criteria for Adverse Events version 5.0.

Abstract - Results and discussion
Total patients were 25, 15 and 10 in monotherapy and combination group, respectively. Median of age (70 vs. 72) and number of previous treatments (3 for both) was similar between groups. The median of TTP was 3 months (interquartile range [IQR]; 2-3.5) in monotherapy group and 3 months (IQR; 1-3) in combination group. The median of TOT was 2.5 months (IQR; 1-3) in the combination group, but in this group 4 patients were still on treatment at cut-off date.
The adverse events of grade ≥ 3 in monotherapy group were neutropenia (30%) and anemia, thrombocytopenia, asthenia and peripheral neuropathy (7% for each one), while in combination group there were asthenia (30%) and neutropenia (10%).
The TTP data in monotherapy group is similar to those of previous studies, but we have not seem better outcomes in the combination group than in the monotherapy, even 2 patients progressed after one month. However, 4 patients from combination group are still under treatment and the TTP could increase.

Abstract - Conclusion
Our study has limitations, the number of patients is low and one of the groups has not ended the treatment yet, but our results show that the patients who can be treated with TAS-102 plus bevacizumab should be carefully selected, because not all of them can achieve a clear benefit, particularly those with an aggressive disease.

P011 Herceptin® and trazimera® immunogenicity in the HER2+ breast cancer treatment

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Abstract - Introduction
One of the differences between biosimilars and the reference drug could be the immunogenicity between them. These differences would alter the production of anti-drug antibodies (ADA) and, thus, conditioning trastuzumab efficacy.
The aim of this study was to determine the presence of anti-trastuzumab antibodies (ADA-Tras) in patients treated with trastuzumab (Herceptin®) and the biosimilar (Trazimera®), both administered intravenously.

Abstract - Material and method
Prospective study about trastuzumab pharmacokinetics in which a preliminary cross-sectional analysis have been performed to determine the ADAs rate in patients with HER2+ breast cancer under routine clinical practice conditions.
To perform the assay, 2 mL of blood corresponding to the trastuzumab trough level was analyzed. The determination of the ADA-Tras in plasma was performed by ELISA immunoassay in automated equipment. A cut-off point was established to qualitatively classify patients as positive or negative.

Abstract - Results and discussion
The study was included 49 patients, all women, with a median age of 53.1 years (37-74 years). 17.2% in metastatic treatment.
The median of trastuzumab administrations was 11 cycles, distributed as:
47.0% (n=24) Herceptin ® treatment, with a median number of administrations of 13.
53.0% (n=25) Trazimera® treatment, with a median number of administrations of 9.
Plasma analysis showed that 100% of samples were negative in ADAs for patients treated with Herceptin® and 96% in the group of patients treated with Trazimera® (p=0.32).

Abstract - Conclusion
With the present study we wanted to show the preliminary results of a prospective trial on of trastuzumab pharmacokinetics, analyzing the influence of the biosimilar in the immunogenicity of the drug. Our results indicate that, at least in the intravenous presentation, there are no immunogenic differences between Heceptin® and (Trazimera®) that condition ADAs generation.

P012 Adherence of anti-emetic prophylactic regimes to international guidelines and incidence of chemotherapy-induced nausea and vomiting in patients of Cancer Institute, Tehran, Iran

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Abstract - Introduction
Chemotherapy is one of the main ways of treating cancer, but it has several adverse effects and nausea and vomiting (N/V) is one of the most annoying side effects of chemotherapy. Rational use of drugs to prevent N/V can be effective in preventing this complication, and in this regard, various guidelines have been developed. The purpose of this study is to investigate the adherence to valid global guidelines, NCCN (National Comprehensive Cancer Network), ESMO (European Society for Medical Oncology), ASCO (American Society of Clinical Oncology).

Abstract - Material and method
This prospective observational study was performed on 186 cancer patients undergoing chemotherapy at the Cancer Institute of Imam Khomeini Hospital in Tehran; Iran. Patients' demographic data, history of chemotherapy, severity of nausea was recorded on MAT questionnaire and adherence to valid global guidelines were recorded in the data collection form.

Abstract - Results and discussion
In this study, 186 patients with a mean age of 11.66 + 52.64 years in the range of 17 to 77 years and with a mean body mass index of 5.01 + 25.79 in the range of 15.03 to 45.18 were included. The emetogenicity of chemotherapy drugs among the patients according to the guidelines of ASCO, ESMO and NCCN were all similar, 23.12% high, 43.01% moderate and 33.87% low emetogenic. Anti-emetic drugs used in monitored patients didn't match with any guidelines. The most important mismatch was in Dexamethasone and Granisetron dosage, and also the absence of Olanzapine in anti-emetic prophylactic regimen of high emetogenic chemotherapies according to ASCO guideline. Also the duration of use of antiemetic drugs such as Dexamethasone, was shorter than recommendation of all guidelines and as expected, almost every patient experienced delayed N/V. In patients with low emetogenic chemotherapy drugs, overuse of anti-emetic drugs was detected.

Abstract - Conclusion
We found that the adherence of prophylactic anti-emetic regimes was low in this institute and most patients, especially those who received high emetogenic chemotherapy have experienced delayed N/V. It seems that applying evidenced-based protocols in cancer institutes is necessary and also presence of trained hospital pharmacist may be helpful.

P013 Adherence to Intravenous Chemotherapy in Tunisian cancer patients at Salah Azaiez institute

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Abstract - Introduction
Adherence rates to intravenous (IV) chemotherapy regimens are high. Medication nonadherence could reduce the effectiveness of medication therapy and could prolong the duration of hospitalization along with high cost for the healthcare system. The purpose of this study was to examine factors that influence the decision to adhere to IV chemotherapy.

Abstract - Material and method
This is a prospective study carried out in the Salah Azaiez institute in Tunisia from December 2021 to March 2022. Data were collected through a questionnaire during an interview with the patient. The evaluation of adherence was based on the schedule of appointments set by doctors on the digitalized medical records. The patient is adherent to the treatment when the appointment is respected. The socio-economic factors were selected in order to evaluate their implication on the adherence to the treatment.

Abstract - Results and discussion
The study included 246 patients. The most represented age group (50.4%) was [40-60] years. 72.8% of patients were women. 97.3% of patients were found to be adherent to the prescribed chemotherapy. Most patients used one mean of transportation to reach the institute (74.4%) but 4.1% of them used more than 3. When asking about their travel fees, 72% of patients considered it very expensive. Most patients, who didn't have any accommodation near the hospital (80.8%), didn't have a place to stay in the case of a postponed chemotherapy cycle. 11.1% of patients who had to spend 1h to 3h to reach Salah Azaiez Institute were non adherent to the treatment. Patients with shorter intercycle delays (33.3%) were non adherent to treatment and only 7.8% of those who had longer intercycle delays were non-adherent to chemotherapy (p=0.046). Non-working patients were more likely to be non-adherent to treatment (relative risk=5.305; 95%CI [1.169-24.086]; p=0.031).

Abstract - Conclusion
Although overall adherence was fairly high, a substantial subpopulation experienced low adherence. Patient related factors have an important impact on adherence levels among the patient receiving chemotherapy.

P014 Advanced Microscopical Non-Invasive Examination of the Supposed Migrastatics for Impact on In Vitro Cell Migration

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Abstract - Introduction
Live H1299 lung carcinoma cells in vitro were exposed to selected drugs with a presumed antimigration activity that implies antimetastatic potential and time-lapse examined with Coherence Controlled Holography Microscopy (CCHM) with holographic incoherent light Quantitive Phase Imaging (hiQPI). It is a methodology that online evaluates the dynamics of morphology, migration, and the growth of tumor cells by weighing them.

Abstract - Material and method
Q-Phase (Telight, Brno, Czech Republic) as a commercially available CCHM was employed for the hiQPI of cells. Four putative migrastatics, vincristine (VIN, 100 nM), doxycycline (DOXY, 1 mg/ml), and 4-hydroxyacetophenone (4HAP, 4 µM) were tested with H1299, using Ibidi µ-Slide VI 0.4 for 20 hours recording with Q-Phase. Cells were cultivated at 37°C in a humidified incubator with 3.5% CO2 in standard Eagle MEM medium with 10% fetal bovine serum, 20 µM gentamicin, and 2mM L-glutamine. For the time-lapse recording, the medium was enriched with 20 mM HEPES to maintain pH 7.4.

Abstract - Results and discussion
This research showed that on the cancer cell line H1299 the vincristine and doxycycline had the greatest migrastatic effect in the 2D environment under given conditions. These putative migrastatics showed an effect on the dynamics of migration and cell morphology.

Abstract - Conclusion
The hiQPI screening is a reliable and economical approach to in vitro introductory testing of potential migrastatics. hiQPI combines high-precision cell imaging, which is important for cell segmentation and thus tracking cell trajectories, with cell growth measurements, thus providing a comprehensive assessment of a potential risk of some cytopathic issues.