Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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hodgkin lymphoma was the commonest underlying malignancy seen in 1.6% (n=3) patients out of which 2 were on rituximab therapy.

Conclusions: Though COVID-19 infection can cause severe implications in cancer patients, prompt identification and timely management can reduce its repercussions and improve outcomes especially in patients with haematological malignancies.

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457P The effect of Interleukin-6 (IL-6) on malignancy in COVID-19 patients in Dr. Moewardi General Hospital Surakarta

M. Ardianti
Jawa Tengah, Medical Faculty of Sebelas Maret University, Surakarta, Indonesia

Background: Interleukin-6 (IL-6) is a cytokine with multifaceted effects playing a remarkable role in the initiation of the immune response. IL-6 also represents one of the main signals in communication between cancer cells and their non-malignant neighbors within the tumor niche. IL-6 also participates in the development of a premetastatic niche and in the adjustment of the metabolism in terminal-stage patients suffering from a malignant disease. IL-6 is a fundamental factor of the cytokine storm in patients with severe COVID-19, where it is responsible for the fatal outcome of the disease. This study aims to determine the effect of IL-6 in patients associated with cancer and COVID-19 infection.

Methods: Case control studies were conducted in Moewardi hospital, Surakarta, Central Java, from February to June 2022. Samples were taken from medical records. All patients with cancer and COVID-19 infection were included. Incomplete data is excluded. Therapy was categorized as hormonal therapy, chemotherapy, and evaluation. Mann Whitney was performed to investigate the average difference. The P-value of <0.05 is significant.

Results: We included 130 patients with cancer and SARS-CoV-2 infection, and 23 patients for the control. We included the total sample of 153. The median age was 50 ± 13 years. The most frequent kind of cancer was breast cancer (n=59, 38.6%) followed by gastrointestinal cancer (n=25, 16.3%), non hodgkin lymphoma (n=21, 13.7%) and other cancers such as hematological malignancy, thyroid cancer, squamous cell carcinoma, and parotid cancer (n=23, 15.5%). A total of 95 patients received active treatment, with hormonal therapy (n=8, 0.08%) and chemotherapy (n=87, 91.57%) of them. The median of IL-6 was 6.80 ± 23.66. There are significant differences of the IL-6 between COVID-19 patients with cancer compared with the control (p<0.001).

Conclusions: The high level of IL-6 in a patient’s body are influenced by cancer progression and serious viral infections such as COVID-19. Interleukin-6 may be responsible for the failure of therapy and, eventually, fatal complications in patients with cancer and COVID-19.

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458P A real-world depiction of difficulties in applicability of IO regimens into clinical practice in metastatic setting

S. Chandra Goteti
Medical Oncology Department, Medcover Cancer Institute, Hyderabad, India

Background: Overall survival across various cancers in metastatic setting has been on the rise with the advent of immunotherapy. Indications include chemo-immunotherapy, immunomodulated therapy and immunotherapy alone basing on the approvals across various lines in particular organ type. However, applicability of the same into real world practice has been dismal in low and middle income countries due to various reasons. Data is lacking in this setting.

Methods: We conducted an observational study at our center to see applicability of IO indications across different metastatic cancers. Consecutive patients between Jan 2018 and Feb 2022 who had metastatic cancer and an indication for IO usage were enrolled and their treatment regimens studied. Patients across different primary sites were included with approved IO regimen. Reasons for non-usage of IO were studied.

Results: Between Jan 2018 and Feb 2022, 464 patients were enrolled who were eligible for treatment with IO either as a single agent or as combination in metastatic setting. The most common indication was NSCLC (21.9%), head & neck (21.1%), RCC (7.7%), bladder (9.4%), endometrium (9.4%), gastric (9%)HCC (8.1%), Hodgkins lymphoma (3.8%), melanoma (3%)SCLC(3%) and so on. Of 464 patients, only 138(25.7%) were finally treated with IO regimen across different lines. The reasons for non-usage were financial constraints (76.3%) which included exclusion of insurance limit followed by denial by insurance company (18%), non-availability of drug (3.4%) and contraindication to IO(2.3%). Of the 138 patients who were treated, 32.4 % had to withdraw the drug owing to financial toxicity while the disease was still responding with the median time to withdrawal being 5.8 months.

Conclusions: This observational study portrays a real world picture of difficulties faced in using approved IO regimens in metastatic setting with financial constraints leading to non-use/withdrawal of drug in nearly 62 % patients. There is an urgent need to address this financial toxicity to benefit more patients with IO agents in lower middle income countries like India.

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460P The role of fluorescence-based cell-free DNA assay for detection of cancer by comparing patients with and without cancer

J.-J. Kim1, S.B. Oh1, K.S. Jung1, S.Y. Oh1, Y.J. Hong1, K. Park1
1Hematology & Oncology, Pusan National University Yangsan Hospital, Yangsan, Republic of Korea; 2Department of Neurology, The Catholic University of Korea, Uijeongbu St. Mary’s Hospital, Uijeongbu, Republic of Korea

Background: A fluorescence-based cell-free DNA (CFD) assay is a simple method for measuring nucleic acids without prior DNA extraction and amplification. Despite numerous studies on CFD, there were few studies that compare the amount of CFD using fluorescence assay between cancer patients and healthy subjects. We investigated whether the amount of CFD is different between cancer patients and participants without any evidence of malignancy.

Methods: We collected blood samples from patients who were diagnosed as any kind of cancer with distant metastasis (patients’ group) and from participants who have completed cancer treatment and were confirmed to have no malignancy at least for 1 year (NED group). Plasma CFD level were analyzed using PicoGreen™ reagent in each group.

Results: Totally 134 participants [patients’ group (n=72), NED group (n=52)] were enrolled. Median age was 69 (27–83) in patient’s group and 65 (34–81) in NED group. In patients’ group, most common primary origin was biliary tract (18, 25.0%), urethral origin (15, 20.8%), pancreas (13, 18.1%), stomach (5, 6.9%), and prostate (5, 6.9%). Median CFD in the patients’ group [9.80 ± 2.20 μg/mL] were significantly higher than that of NED group [8.40 ± 0.86, p<0.001]. In patients with high tumor burden indicating 3 or more of metastatic organs, CFD was significantly higher (10.70 ± 3.26) than that in patients with low tumor burden (9.45 ± 1.47, p=0.008). There was no significant correlation between CFD and tumor markers including carcinoembryonic antigen (p=0.468) and carbohydrate antigen 19-9 (p=0.134). Other factors including body weight, body surface area, and age were not related with CFD (p>0.05).

Conclusions: In our study CFD was higher in cancer patients compared with NED, especially with higher tumor burden. Additionally, CFD was not correlated with other tumor markers. A fluorescence-based CFD assay needs further investigation as a versatile tool of cancer treatment including early detection, monitoring for treatment responses, and predicting prognosis based on our results.

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461P Spectrum of immune related adverse events (irAE) on treatment with checkpoint inhibitors and its association with survival: A real-world experience from India

N.Y. Murthy1, A. Rauthan1, P. Patil1, S. Sampige Prasannakumar1, S. Zaveri1
1Medical Oncology Dept., Manipal Comprehensive Cancer Center Manipal Hospital, Bangalore, India; 2Surgical Oncology, Manipal Comprehensive Cancer Center Manipal Hospital, Bangalore, Karnataka, India

Background: Immune checkpoint inhibitors (ICIs) are associated with a unique spectrum of side effects known as immune related adverse events (irAE). It has also been hypothesized that occurrence of irAE is associated with better survival. There is paucity of literature of the safety profile of ICIs in India and its association with survival.

Methods: An ambi-directional observational study was conducted of patients who received treatment with ICI (PD-1/PDL-1 inhibitors) at our centre between April 2016 - October 2021. They were followed up till May 31st 2022. Organ specific irAE toxicities