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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503P The IMPRESS-Norway trial: Improving public cancer care by implementing precision cancer medicine in Norway

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Background: There is a high demand for precision cancer treatment. Methods for advanced molecular diagnostics are available, and a considerable number of drugs are already approved on specific indications. However, these drugs are only to be used within subgroups of patients with the specific diagnostics determined by clinical studies. Some drugs targeting a specific pathway or gene aberration, might just as well be efficient in patients with other tumour types, not yet tested.

Methods: In this national, investigator-initiated, prospective, open-label, non-randomized combined basket- and umbrella-trial, patients are enrolled into multiple parallel treatment cohorts. Patients with progressive disease with no further standard therapy, are eligible. Each cohort is defined by the patient's tumour type, molecular profile of the tumour, and study drug. Treatment outcome in each cohort is monitored by using a Simon two-stage-like 'admissible' monitoring plan to identify evidence of clinical activity. All drugs available in IMPRESS-Norway are regulatory approved. Molecular diagnostics with the TSO-500 gene panel are funded by the public health care system. In addition, patients included in IMPRESS-Norway are screened by analyses of ctDNA. Currently, 17 drugs are provided by five different pharmaceutical companies / research grants. The primary objective in the study is clinical benefit of treatment at 16 weeks of treatment, defined as complete response, partial response, or stable disease.

Results: The trial opened for accrual April 1st 2021. As of April 25, 2022, 359 patients had been included in the molecular screening, and 295 had completed evaluation in the national molecular tumour board. 67 patients were allocated to therapy in an IMPRESS-Norway treatment-cohort. Early aggregated data at 16-weeks show clinical benefit in 43% (12/26 of the first patients reaching 16 weeks of treatment). Updated results will be presented.

Conclusions: Patients with advanced cancer progressing on standard treatment are eligible for IMPRESS-Norway. Genetic alterations indicating benefit of the drugs currently available in the study, are detected in 23% of the patients.

Clinical trial identification: EudraCT: 2020-004414-35; NCT04817956.

Legal entity responsible for the study: Oslo University Hospital.

Funding: Funding from the regional health authorities, The Norwegian Cancer Society, Radiumhospitalets legater, Drug and funds from Roche, Novartis, Incyte, Eli Lilly and AstraZeneca.

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504P SARS-CoV-2 Omicron (B.1.1.529) variant infection leads to high morbidity and mortality in unvaccinated patients with cancer

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Background: Evidence is lacking as to the impact of SARS-CoV-2 Omicron (B.1.1.529) variant in oncological patients.

Methods: Capitalizing on OnCovid study data (NCT04393974), we analysed COVID-19 morbidity and case fatality rate at 28 days (CFR_{28}) of unvaccinated patients across 3 phases defined following the evolution of the pandemic in Europe, according to date of COVID-19 diagnosis: "Pre-vaccination" phase (27/02/2020-30/11/2020), "Alpha-Delta variant" phase (01/12/2020-14/12/2021), "Omicron variant" phase (15/12/2021-31/01/2022).

Results: By the data lock of 04/02/2022, 3820 patients from 37 institutions across 6 countries were entered. Out of 3473 eligible patients, 2033 (58.6%), 1075 (30.9%) and 365 (10.5%) were diagnosed during the Pre-vaccination, Alpha-Delta and Omicron phases. In total 659 (61.3%) and 42 (11.5%) were unvaccinated in the Alpha-Delta and Omicron. Unvaccinated patients across the Omicron, Alpha-Delta and Pre-vaccination phases experienced similar CFR_{28} (27.5%, 28%, 29%). Following propensity score matching, 42 unvaccinated Omicron patients were matched with 122 and 121 patients from the Pre-vaccination and Alpha-Delta phases respectively, based on country of origin, sex, age, comorbidity burden, primary tumour, cancer stage and status, and the receipt of systemic anticancer therapy at COVID-19. Unvaccinated Omicron patients experienced improved COVID-19 outcomes in comparison to patients diagnosed during the Pre-vaccination phase. Morbidity and mortality were comparable to those of unvaccinated patients diagnosed during the Alpha-Delta phase.

Table: 504P

	Omicron vs Pre-vaccination OR (95%CI)	Omicron vs Alpha-Delta OR (95%CI)
CFR_{28}	0.43 (0.19-0.94)	0.56 (0.25-1.24
Hospitalization	0.30 (0.12-0.72)	1.07 (0.46-2.51)
Oxygen therapy	0.39 (0.18-0.84)	0.77 (0.35-1.66)
COVID-19 complications	0.47 (0.22-1.01)	0.84 (0.39-1.79)

Conclusions: Despite time-dependent improvements in outcomes reported in the Omicron phase, patients with cancer remain highly vulnerable to SARS-CoV-2 in absence of vaccinal protection. This study provides unequivocal evidence in support of universal vaccination of patients with cancer as a protective measure against morbidity and mortality from COVID-19.

Clinical trial identification: NCT04393974.

Legal entity responsible for the study: The authors.

Funding: Imperial College Biomedical Research Centre.

Disclosure: All authors have declared no conflicts of interest.

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505P The impact of COVID-19 on the wellness and resilience of the Canadian medical oncology workforce: A Canadian Association of Medical Oncologists survey

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Background: The COVID-19 (C19) pandemic has presented professional and personal challenges. The Canadian Association of Medical Oncologists (CAMO) has been examining the effects of C19 on the workforce to understand the impact that the pandemic has had on the medical oncology (MO) community. This survey examines how C19 has impacted the wellness and resilience of the MOs and will assess the impact that C19 may have on MO workforce capacity going forward.

Methods: An English-language, multiple-choice survey conducted in March 2022. The survey was distributed by email to MOs identified through CAMO and the Royal College of Physicians and Surgeons directory (n=477).

Results: Response rate was 32% (n=151). Respondents were 59% female, 88% worked in a comprehensive cancer centre, with 64% having been in practice for >10 years. Physical (60%) and mental (60%) wellness were reported as the biggest personal challenges. 47% are dissatisfied or with their current work-life balance. 83% reported that their workload has increased since the beginning of C19. 56% are considering retiring or reducing total working hours in the next 5 years and 35% have considered leaving MO entirely. Career length >10 years and age >40 were associated with considering leaving MO (p=0.01 and p=0.03 respectively). Career length >10 years was associated with consideration of reducing total working hours within the next 5 years (p=0.045).

Table: 505P Predictors of planned change in practice

	Considering leaving MO	p-value	Considering reducing hours	p-value
Gender Female Male	53% 45%	0.23	59% 40%	0.69
Age <40 >40	12% 88%	0.03	20% 80%	0.43
Practice Setting Comprehensive cancer center Other	94% 6%	0.08	89% 11%	0.58
Years in practice <10 >10	23% 77%	0.01	30% 70%	0.045
Feel valued by institution Yes No	27% 73%	0.98	24% 76%	0.36
Feel valued by public Yes No	38% 62%	0.70	45% 55%	0.26

Conclusions: This survey corresponds with the the C19 pandemic becoming endemic. Concerns identified include physical and mental wellness, workload escalation and job dissatisfaction. One-third of respondents are considering leaving MO, associated with >10 years in practice suggesting potential loss of experienced workforce. In the face of escalating demand for MO services with rising cancer incidence, prevalence and complexity, workload modification strategies are needed to ensure the stability of the Canadian MO workforce going forward.

Legal entity responsible for the study: The authors.

Funding: Has not received any funding.

Disclosure: S. Gill: Financial Interests, Personal, Advisory Board: Roche Canada, Eisai, Taiho Canada, Merck Canada, Pfizer, Bristol Myers Squibb; Non-Financial Interests, Advisory Role, Medical steering committee: Colorectal Cancer Canada; Non-Financial Interests, Leadership Role, Vice-president: Canadian association of medical oncologists. All other authors have declared no conflicts of interest.

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506P The prognostic utility of neutrophil/lymphocyte ratio (NLR) and platelet/lymphocyte ratio (PLR) in carcinoma of unknown primary (CUP): An experience from a tertiary UK cancer centre

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Background: CUP is a heterogeneous disease entity, as a result prognostication in this cohort of patients (pts) can be difficult. High NLR (hNLR) and PLR (hPLR) have been shown to be associated with poorer prognosis in solid tumours, however, their utility in CUP is poorly described. We aimed to examine the role of NLR/PLR as prognostic markers in pts with CUP at our centre.

Methods: All pts referred to our institute between January 2016-June 2020 with pre-treatment bloods available were included. Demographics, treatment history and outcomes were collected. HNLR was defined as a ratio >5 and hPLR as a ratio > 180. Parametric tests were used to compare variables between groups. Overall survival (OS) was calculated using Kaplan Meier methodology and Cox regression analysis. Log rank analysis was used to assess survival differences between groups.

Results: 161 pts were included, 76 men (47%) and 85 women (53%). Median age at diagnosis was 67(range 25-93). The median NLR of the group was 4.15(range 1.03-22.0) with 68(42%) pts having a hNLR. The median PLR was 229.1(range 16.7-1073.3) with 110 (68%) pts having a hPLNR. Compared to pts with a normal NLR (nNLR) or PLR (nPLR) those with a high NLR or PLR were less likely to receive systemic anticancer therapy (72% vs 56% p=0.02) and (60% vs 76% p=0.05). 73.5% of pts with a nNLR were ECOG-PS 0-1 compared to 51.5% with a hNLR (p=0.005). 78% of pts with ECOG-PS 0-1 had a nPLR compared to 57.8% who had a hPLR (p=0.015). At a median follow up time of 48.8 months, 139(86%) pts had died. The median OS for nNLR and hNLR was 12.6 months and 5.9 months respectively (p<0.001). On Cox regression analysis, those with a hNLR had 2-fold increased risk of death compared to those with a nNLR (HR 2.0 95% CI 1.4-2.8 P<0.001). The median OS for nPLR and hPLR was 15.2 months and 7.3 months respectively (p<0.001). High PLNR was associated with a 2.3-fold increased risk of death (HR 2.3 95% CI 1.6-3.5 p<0.001).

Conclusions: Similarly, to other solid tumours, high NLR and PLR are highly prognostic in pts with CUP. Both offer the potential of providing a bedside prognostic tool in this heterogenous group of pts aiding discussions surrounding treatment and prognosis.

Legal entity responsible for the study: The authors.

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507P Clinical characteristics and survival outcomes in neuroblastoma: A single center study at a regional cancer center

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Background: Neuroblastoma is the most common extracranial solid tumor of childhood accounting for 10% of childhood cancers with a median age of diagnosis of 19 months. Outcomes of the disease show a varied presentation from spontaneous regression to fatal death.

Methods: This is a single centre observational study of 114 patients admitted in regional cancer centre, in South India from April 2014 to April 2020. Baseline characteristics noted and disease was risk stratified accordingly. Patients were treated based on age at presentation and resectability of disease. Patients < 6 months were observed for spontaneous regression. Older patients with potentially resectable disease received NACT with CADO protocol followed by surgery and Adjuvant chemotherapy. All stage IV patients received RAPID COJEC protocol followed by Autologous BMT (if complete metabolic response achieved). OS at the end of 2 years was measured.

Results: Among 114 patients, 40.3% were male and 59.7% were female. Patients with age <1 yr., 1-5 yr., and > 5 yr. were 15.7%, 57.8%, and 26.3% respectively. The commonest primary site of presenting mass was in abdomen, left suprarenal mass in 42 cases (36.84%) and right suprarenal mass in 28 cases (24.56%). Proptosis and raccoon eyes were seen in 13 cases (11.40%). OMAS (8 cases) & VIP syndrome (3 cases) were the most common paraneoplastic syndromes. The commonest histopathology was neuroblastoma (82%), followed by ganglioneuroblastoma. The OS at 2 yrs. was 34.8%, 56.25%, and 75% among high risk, intermediate-risk, and low-risk groups respectively.