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15590 Efficacy and toxicity of BNT162b2 vaccine in cancer patients

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Background: Efficacy and safety profile of COVID-19 vaccines had been acquired from phase III studies. Nevertheless, cancer patients were not represented in these trials. In 1/2021 mass vaccination of high-risk population, including cancer patients, was initiated in Israel. We aimed to prospectively evaluate efficacy, immunogenicity and safety of BNT162b2 vaccine in cancer patients.

Methods: Cancer patients on active treatment were prospectively enrolled following first dose of BNT162b2 or after a second dose. Serum was collected after each dose and additionally in case of seronegativity. An age-matched cohort of healthcare workers served as controls. Questionnaires regarding sociodemographics and adverse reactions were employed at serum collection. FDA-approved assay was used to assess IgG at all time-points. Patients' electronic medical records were reviewed for documentation of COVID-19 infection, blood counts, liver enzymes and imaging studies.

Results: The study included 232 cancer patients and 261 controls. Following first dose 29% of patients were seropositive compared with 84% of controls ($p < 0.001$). Following second dose seropositive rate reached 86%. Rate per 1000-person days after first dose were 12.5 for patients and 48.5 for controls. Chemotherapy reduced immunogenicity (OR 0.41 [95%CI 0.17-0.98]). In seronegative patients, rate of documented leukopenia reached 39%. No COVID-19 cases were documented throughout the study period except two cases following the first dose. Reported adverse events resembled former published studies.

Conclusions: Our results indicate the BNT162b2 appear to be safe and effective in cancer patients. There is a pronounced lag in antibody production compared with non-cancer controls, however seroconversion occurred in most patients after the second dose. Future real-world data is warranted to determine the long-term efficacy of the vaccine with regard to type of anti-cancer treatment.

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15600 Prevalence and impact of COVID-19 sequelae on treatment pathways and survival of cancer patients who recovered from SARS-CoV-2 infection

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Background: The long-term impact of COVID-19 in cancer patients (pts) is undefined.

Methods: Among 2795 consecutive pts with COVID-19 and cancer registered to OnCovid between 01/2020 and 02/2021, we examined clinical outcomes of pts reassessed post COVID-19 recovery.

Results: Among 1557 COVID-19 survivors, 234 (15%) reported sequelae including respiratory symptoms (49.6%), fatigue (41%) and cognitive/psychological dysfunction (4.3%). Persisting COVID-19 sequelae were more likely found in males ($p = 0.0407$) aged ≥ 65 years ($p = 0.0489$) with ≥ 2 comorbidities ($p = 0.0006$) and positive smoking history ($p = 0.0004$). Sequelae were associated with history of prior hospitalisation

($p < 0.0001$), complicated disease ($p < 0.0001$) and COVID-19 therapy ($p = 0.0002$). With a median post-COVID-19 follow up of 128 days (95%CI 113-148), multivariable analysis of survival revealed COVID-19 sequelae to be associated with an increased risk of death (HR 1.76, 95%CI 1.16-2.66) after adjusting for sex, age, comorbidities, tumour characteristics, anticancer therapy and COVID-19 severity. Out of 473 patients who were on systemic anticancer therapy (SACT) at COVID-19 diagnosis; 62 (13.1%) permanently discontinued therapy and 75 (15.8%) received SACT adjustments, respectively. Discontinuations were due to worsening performance status (45.1%), disease progression (16.1%) and residual organ dysfunction (6.3%). SACT adjustments were pursued to avoid hospital attendance (40%), prevent immunosuppression (57.3%) or adverse events (20.3%). Multivariable analyses showed permanent discontinuation to be associated with an increased risk of death (HR 4.2, 95%CI: 1.62-10.7), whereas SACT adjustments did not adversely affect survival.

Conclusions: Sequelae post-COVID-19 affect up to 15% of patients with cancer and adversely influence survival and oncological outcomes after recovery. SACT adjustments can be safely pursued to preserve oncological outcomes in patients who remain eligible to treatment.

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15610 The future of the oncology workforce since COVID-19: Results of the ESMO Resilience Task Force survey series

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Background: The ESMO Resilience Task Force has investigated wellbeing since COVID-19 in relation to work, lifestyle and support factors in oncology professionals globally. We reported on the significant impact of the initial surge of the pandemic on wellbeing and job performance (Banerjee et al. 2021). As the pandemic continues, it is imperative to understand experiences and concerns to better inform support measures for the oncology workforce.

Methods: Three anonymous online surveys were conducted during the COVID-19 pandemic (S1, Apr/May 2020; S2, Jul/Aug 2020; S3, Feb/Mar 2021). Longitudinal analysis of responses at these timepoints were conducted. Here, we present responses to questions on job demands and resources, and perceived job performance since COVID-19 (JP-CV).

Results: We analysed 3894 individual responses (S1, n=1520; S2, n=942; S3, n=1432): 53% (n=1961/3731) female, 45% (n=1679/3731) ≤ 40 years, 31% (n=1132/3692) non-white ethnicity, >100 countries. There has been significant increases from S1 to S3 ($p < 0.001$) in feeling overwhelmed with workload (29% vs 45%); COVID-19-related clinical (14% vs 58%) and research (16% vs 64%) work; out-of-hours work (16% vs 41%), shift work (12% vs 26%) and overall working hours (17% vs 47%); and inadequate time for personal/family life (35% vs 45%). 59% (n=1156/1946) were