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# Annals of Oncology

the vaccination. Here, we evaluated attitude towards and effects of COVID-19 vaccination in patients with breast or gynecological cancer. The aim was to improve counseling of our patients in clinical routine.

**Methods:** Since March 15<sup>th</sup> 2021, patients who received one of the approved COVID-19 vaccines were routinely interviewed about immediate (0-2 days) and late side effects (within two weeks after vaccination). Clinical parameters such as current therapy, time interval between therapy administration and vaccination, and changes in the therapy schedule due to the vaccination were documented. Furthermore, the willingness of non-vaccinated patients to be vaccinated was assessed. The collected data were anonymously analyzed as a part of routine quality assurance.

**Results:** By May 10<sup>th</sup> 2021, 111 out of 217 (51.1%) interviewed patients had received at least one shot of COVID-19 vaccine and 21 patients both shots. More than half of the vaccinated patients were >55y (60.2%; mean: 60.7y, range 30-92y); 69% with UICC/ FIGO stage III/IV cancer. 74.6% received Commirnaty (BioNTech/ Pfizer), 18.9% Vaxevria (AstraZeneca) and 6.5% Covid-19 Vaccine Moderna. After the first shot, 33.3% of the patients described no side effects, 49.1% reported a local reaction (swelling or pain), 23.4% flu-like symptoms, 10.8% headache and 3.6% nausea. 11 patients had symptoms that lasted longer than two days. In 11 cases, COVID-19 vaccination had an impact on delivery of the systemic therapy (n=10 postponements of therapy and n=1 dose reduction). 61.3% of the non-vaccinated patients (in total n=118) were already registered to get vaccinated; 32.8% chose to postpone vaccination for personal reasons; 5% refused vaccination.

**Conclusions:** Breast and gynecological cancer patients appear to tolerate COVID-19 vaccination well under systemic therapy and only in few cases the vaccination interfered with the treatment schedule. Updated results will be presented at the ESMO Congress.

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## 1593P COVID-19 vaccine acceptance among Tunisian cancer patients: A cross-sectional study

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Background: Since the approval of several Covid-19 vaccines, the vaccination process worldwide was facing several challenges, one of them is vaccine uptake among the population, for instance cancer patients. We aimed to measure the acceptability towards the Covid-19 vaccination in cancer patients and to investigate determinant factors associated with the patient's choice.

**Methods:** We conducted a cross-sectional survey with a self-administered questionnaire delivered to 329 cancer patients in 3 oncology cancer centers in Tunisia between February-April 2021. Logistic regression was used to evaluate Odds Ratio predicting patient's intentions toward the vaccine.

Results: Fifty point four percent (n=166) reported their intent to be vaccinated as soon as the vaccine is available, 28.4% (n=93) reported to definitely refuse the vaccine and 21.2% (n=70) did not make their decision yet. High educational level, history of comorbidities, history of influenza vaccination in the current season and patient's opinion about the severity of Covid-19 did not predict vaccine resistance. However, patients who think that the vaccine may interfere with treatment efficacy (OR=7.28, 95%CI [2.5-12.32]), or may impact cancer outcome (OR=6.14, 95%CI[2.27-16.7]), were significantly more likely to refuse the vaccine. Patient's who disagree that the vaccine is a major weapon against the pandemic (OR=6.07, 95%CI [2.34-9.52]) or that it could reduce the virus transmission (OR=7.34, 95%CI [4.22-11.81]) were also significantly more likely to reject the vaccination. Safety concerns were also significant predictive factors (OR=7.9, 95%CI [4.10-11.27]. Confidence level in the authorities played a significant role in patient's acceptance of the vaccine (OR=2.9, 95%CI [1.47-5.23]), indeed patients who were not registered (OR=5.9, 95%Cl [1.58-8.7]) or not informed about the Tunisian national vaccination platform EVAX (OR=5.51, 95%CI [2.1-7.9]) were more likely to be against the vaccine.

**Conclusions:** Cancer patient's education about the impact of the vaccine on their disease and on the Covid-19 is needed. Governments should build strategies to gain more population confidence.

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## 1594P SARS-CoV-2 vaccines in cancer patients (pts), real-world data (RWD) from 1069 Belong.life users

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Background: The COVID-19 pandemic continues to have a serious impact on many people, including cancer pts. The US CDC and oncology groups (ASCO, ESMO, ACS) made recommendations as to what high risk groups should be vaccinated first which includes cancer pts. Users of Belong.life, a worldwide, free, and voluntary, digital health application for cancer pts, replied to a targeted survey including demographic & clinical questions related to the pts cancers, ongoing therapies and the Covid 19 vaccination characteristics, and interactions.

**Methods:** In this prospective study, 1069 cancer pts, Belong.life users, voluntarily replied to a survey asking demographic and clinical questions related to their Covid 19 vaccination and cancer status characteristics.

Results: Most of the pts were North American based (91 %), with 6.3 % from Europe and 2.6% from the rest of the world. 72% were between 50-69 years of age, and 79.5% were females. Five most common diagnosis were Breast Cancer (35.2%), gynecological (14.4%), gastrointestinal (13.3%), lung cancers (9.7%) and genitourinary (7%). 59% of the pts received chemotherapy,14.2% immunotherapy and 32.8% had radiotherapy over the past 12 months prior to receive the Covid 19 vaccination, which consisted of mRNA vaccines in 82.2% (Pfizer 46.2%, Moderna 36%). 4.9% of the pts refused vaccination. 82.3% of the pts had none (39.3%) or mild (43%) side-effects (S/E) and only 2.4% reported severe S/E. Most S/E lasted 1-3 days (89.4%) consisting mainly of sore arm (42.5%), headache (23.3%), fatigue (21.1%), and temperature (18.5%). Swollen lymph-nodes and allergic reactions were only reported in 0.7% (each). 49% of the pts were vaccinated while actively engaged on treatment, and in 96% there was no delay, interruption, or stoppage of the anticancer therapy.

**Conclusions:** This is the first large report on Real word data voluntarily obtained from 1069 Belong.life users undergoing anticancer treatment with 90% of them receiving a Covid 19 vaccination. The large majority of pts had none or mild S/E (82.3%), and those were short lived (1-3 days in 89.4%) while only in 2% it was graded as severe. In 96% of the pts their ongoing anticancer therapy did not necessitate to be delayed, interrupted, or stopped.

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### Acceptance of COVID-19 vaccination among cancer patients in an Irish cancer centre

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Background: Hospitalised cancer patients have a three times higher risk of death (14%) from COVID-19 than the general public. Vaccination provides an unprecedented opportunity to decrease morbidity & mortality, however, there is a limited data regarding cancer patients' attitudes towards COVID-19 vaccination.

**Methods:** An anonymised questionnaire was completed by volunteering cancer patients attending the ambulatory care unit of a large tertiary cancer centre (Feb to April 2021), prior to vaccination rollout in this cohort. It assessed patients' acceptance of, and attitudes toward, COVID-19 vaccination. Statistical significance was assessed with Chi-square test ( $\chi$ 2).

**Results:** There was an 80% response rate (143/179). This included 79 females (55%) with a median age range of 51–60 yrs. (n = 35/24%). Most (78%) had a good performance status (PS = 0-1) & lung was the most frequent (28%) cancer type. Eight (6%) had previous COVID-19 infection. Among respondents, 128 (90%) intended on getting vaccinated, 12 (8%) were unsure & three (2%) would refuse. Those intent on vaccination were less concerned with side effects, viewed the pandemic as serious & perceived cancer as a cause for more severe infection compared to the rest (Table). All 101 (71%) patients who received the influenza vaccine were intent on COVID vaccination. Almost 20% (n=28) reported that they were more likely to receive the flu vaccine due to the pandemic. Twelve (8%) identified attending their GP as a barrier, with 97% (n=135) willing to attend hospital for vaccination. While this service is free, 69% (n=99) were willing to pay, with nearly 40% (n=57) up to €50.