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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1714P Change of circulating pro-inflammatory markers between pre-COVID-19 condition and COVID-19 diagnosis predicts early death in cancer patients: The FLARE score

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Background: Inflammation plays a central role in severe COVID-19 disease. Likewise, in cancer patients (pts), a circulating pro-inflammatory status (proinflam-status) is associated with poor outcomes. We aimed to assess if a proinflam-status induced by cancer can negatively impact on COVID-19 outcomes.

Methods: Multicenter retrospective cohort of cancer pts with SARS-CoV-2 infection across 12 international centers. Circulating inflammatory markers were collected at two timepoints: pre-COVID condition (-15 to -45d before COVID-19 diagnosis) and COVID-19 diagnosis. Tumor-induced proinflam-status was defined by high derived neutrophil to lymphocyte ratio (dNLR>3) at pre-COVID condition. COVID-induced proinflam-status was defined by +100% increase of dNLR between both timepoints. We built the FLARE score, combining both **T**umor and **I**nfection-induced inflammation: **T+/I+** (poor), if both proinflam-status; **T+/I-** (T-only), if inflammation only due to tumor; **T-/I+** (I-only), if inflammation only due to COVID; and **T-/I-** (favorable), if no inflam-status. Primary endpoint was 30-day mortality.

Results: 287 pts were enrolled with a median follow-up of 23d [95%CI 22-26]. Median age was 69 (range 35-98), 52% were male and 49% had hypertension. As per cancer characteristics: 68% had active disease, 52% advanced stage and 79% had a baseline PS≤1. Thoracic cancers were the most common (26%) and 61% of pts were under systemic therapy. The dNLR was high in 24% at pre-COVID condition *vs.* 55% at COVID-19 diagnosis. Median change between both timepoints was +67% (IQR: 0% to +153%); 40% had +100% increase of dNLR. Pts distribution across FLARE groups were: 5% in poor (n=9), 20% in T-only (n=39), 35% in I-only (n=69) and 40% in favorable (n=80). Overall mortality rate was 27%. According to FLARE score: 67% mortality for poor *vs.* 35% for I-only *vs.* 33% for T-only *vs.* 19% in favorable group (p=0.008). The FLARE poor group was independently associated with 30-day mortality [OR 5.7;1.02-31.2].

Conclusions: Both tumor and infection-induced proinflam-status impact on COVID-19 outcomes in cancer pts. The FLARE score, based on simple dynamics between two timepoints, allows to identify the population at higher risk for early death.

Legal entity responsible for the study: Aleix Prat.

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1715P Plinabulin (Plin) is a more favorable option for the prevention of chemotherapy induced neutropenia (CIN) than pegfilgrastim (Peg) during the COVID-19 pandemic

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Background: Due to COVID-19, the NCCN Myeloid Growth Factor Panel expanded prophylactic G-CSF use to chemotherapy with Intermediate Risk (10%-20% risk) of Febrile Neutropenia (FN), and to Low Risk FN patients (pts) who previously developed FN. Preservation of resources for COVID-19 pts by reducing hospitalizations and emergency room visits by cancer chemotherapy pts is the intent of these changed recommendations. Other recommendations include use of self-injecting or on-body injector Peg, to minimize COVID-19 exposure at outpatient center by cancer pts and limiting prophylactic platelet transfusion to preserve blood product supply. Plin is an attractive alternative: it is a novel, non-G-CSF small molecule with CIN protection comparable to Peg, is given once 30 minutes after Chemo, and avoids the need for healthcare system touches on Day 1-3 for G-CSF administration. In contrast to Peg, Plin does not cause bone pain and thrombocytopenia and maintains quality of life.

Methods: We compared the combined CIN data with single agent (SA) Plin 20 mg/m2 (n=29) vs. SA Peg 6mg (n=35) from 2 different phase II CIN studies over 4 cycles: 1. Study 105 in NSCLC pts given Intermediate FN Risk Docetaxel 75 mg/m2 (Doc) pts with risk factors), and 2. Study 106 in Breast cancer pts given High FN Risk Doc +Doxorubicin 50 mg/m2 + Cyclophosphamide 50mg/m2 (TAC). Plin was given as a single IV infusion on Day (D)1, 30 min after the last Chemo, and Peg 6mg given on D2 by SC injection. Grade 4 Neutropenia (Gr 4 N), Hospitalizations (Hosp), Infection rate (Inf), Sepsis (Sep), all Grade Thrombocytopenia (T) or Gr 2/3 T and Bone Pain (BoP) is summarized for SA Plin and SA Peg. (NS= non-significant).

Results: .

Table: 1715P

	Gr 4 N	Hosp	Inf	Sep	All Gr T	Gr 2/3 T	Gr 3 T	BoP
Pegfilgrastim	42.9%	11.4%	5.71%	0%	68.6%	20%	8.57%	Yes
Plinabulin	44.8%	13.8%	6.90%	3.44%	24.1%	3.4%	0%	No
p-value	NS	NS	NS	NS	0.0002	0.025	0.06	-

Conclusions: Plin requires at least 50% fewer touches to the health care system and is equally effective as Peg for prevention of CIN and its clinical sequelae. Plin causes less thrombopenia and bone pain. Plin (given as a 40 mg fixed dose) is currently in two phase III trials for CIN.

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1716P Vigil plasmid (VP), a dual bi-shRNA-furin/GMCSF construct from cancer to SARS-CoV-2

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Background: SARS-CoV-2 genome reveals a unique furin cleavage site change at S1/S2 junction and furin-like S2' cleavage site which promotes membrane fusogenic pathway entry and exit to human host cells. Clinical testing of VP, used in an autologous tumor vaccine (Vigil), demonstrates >90% knockdown of TGFβ, a downstream furin protease product, elevation of GMCSF and safety and benefit in solid tumor cancer patients.