2021 ESMO congress

1565MO

Time-dependent improvement in the clinical outcomes from COVID-19 in cancer patients: An updated analysis of the OnCovid registry

D.J. Pinato[1], M. Patel[2], M. Lambertini[3], E. Colomba[4], F. Pommeret[5], M. Van Hemelrijick[6], A. Zambelli[7], T. Newsom-Davis[8], R. Salazar[9], A. Bertuzzi[10], G. Gaidano[11], G. Rizzo[12], G. Patel[13], E. Felip[14], A. Prat[15], J. Aguilar-Company[16], J. Tabernero[17], N. Diamantis[18], A. Gennari[19], A. Cortellini[20]

[1] Surgery and Cancer, Imperial College London - Hammersmith Hospital, London, UK, [2] Surgery and Cancer, Imperial College London, London, UK, [3] Department of Medical Oncology and Department of Internal Medicine, IRCCS Ospedale Policlinico San Martino and University of Genoa, Genoa, Italy, [4] Department of Cancer Medicine, Gustave Roussy Cancerology Institute, GINECO group, Villejuif, France, [5] Medical Oncology Dept., Institut Bergonié, Bordeaux, France, [6] Translational Oncology and Urology Research, King's College London, London, UK, [7] Oncologia, Azienda Ospedaliera Papa Giovanni XXIII, Bergamo, Italy, [8] Oncology Dept., Chelsea and Westminster Hospital - NHS Trust, London, UK, [9] Oncology Dept, Institut Català d'Oncologia-Hospital Duran i Reynals, Hospitalet De Llobregat, Spain, [10] Medical Oncology Dept., Istituto Clinico Humanitas, Rozzano, Italy, [11] Department of Translational Medicine, Amedeo Avogadro University, Novara, Italy, [12] Oncology Dept., Fondazione IRCCS Policlinico San Matteo, Pavia, Italy, [13] Medical Oncology Unit, University College, London, UK, [14] Medical Oncology Dept., Catalan Institute of Oncology, Badalona, Spain, [15] Medical Oncology Department, Hospital Clinic y Provincial de Barcelona, Barcelona, Spain, [16] Medical Oncology, Vall d'Hebron University Hospital and Institute of Oncology, Barcelona, Spain, [17] Medical Oncology Dept., Vall d'Hebron University Hospital, Barcelona, Spain, [18] Drug Development Unit, The Royal Marsden Hospital NHS Foundation Trust, Sutton, UK, [19] Medical Oncology Department, Università degli Studi del Piemonte Orientale - Scuola di Medicina, Novara, Italy[20] Medical Oncology Department, Ospedale Civile San Salvatore - ASL 1- Avezzano Sulmona L'Aquila, L'Aquila, Italy

Background

Early reports from registry studies demonstrated high vulnerability of cancer patients from COVID-19, with case-fatality rates (CFR) >30% at the onset of the pandemic. With advances in disease management and increased testing capacity, the lethality of COVID-19 in cancer patients may have improved over time.

Methods

The OnCovid registry lists European cancer patients consecutively diagnosed with COVID-19 in 35 centres from Jan 2020 to Feb 2021. We analysed clinical characteristics and outcomes stratified in 5 trimesters (Jan-Mar, Apr-Jun, Jul-Sep, Oct-Dec 2020 and Jan-Feb 2021) and studied predictors of mortality across 2 semesters (Jan-Jun 2020 and Jul 2020-Feb 2021).

Results

At data cut-off, the 2634 eligible patients demonstrated significant time-dependant improvement in 14-days CFR with trimestral estimates of 29.8%, 20.3%, 12.5%, 17.2% and 14.5% ($p<0.0001$). Compared to the 2nd semester, patients diagnosed in the Jan-Jun 2020 time period were ≥65 (60.3% vs 56.1%, $p=0.031$) had ≥2 comorbidities (48.8% vs 42.4%, $p=0.001$) and non-advanced tumours (46.4% vs 56.1%, $p<0.001$). COVID-19 was more likely to be complicated in Jan-Jun 2020 (45.4% vs 33.9%, $p<0.001$), requiring hospitalization (59.8% vs 42.1%, $p<0.001$) and anti-COVID-19 therapy (61.7% vs 49.7%, $p<0.001$). The 14-days CFR for the 1st and 2nd semester was 25.6% vs 16.2% ($p<0.0001$), respectively. After adjusting for gender, age, comorbidities, tumour features, COVID-19 and anti-cancer therapy and COVID-19 complications, patients diagnosed in the 1st semester had an increased risk of death at 14 days (HR 1.68 [95%CI: 1.35-2.09]), but not at 3 months (HR 1.10 [95%CI: 0.94-1.29]) compared to those from the 2nd semester.

Conclusions

We report a time-dependent improvement in the mortality from COVID-19 in European cancer patients. This may be explained by expanding testing capacity, improved healthcare resources and dynamic changes in community transmission over time. These findings are informative for clinical practice and policy making in the context of an unresolved pandemic.

Clinical trial identification

NCT04393974.

Legal entity responsible for the study

Imperial College London.

Funding

Has not received any funding.

Disclosure

D.J. Pinato: Financial Interests, Personal, Speaker's Bureau: ViiV Healthcare; Financial Interests, Personal, Speaker's Bureau: Bayer; Financial Interests, Personal, Advisory Board: EISAI; Financial Interests, Personal, Advisory Board: Roche; Financial Interests, Personal, Advisory Board: AstraZeneca. All other authors have declared no conflicts of interest.