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COVID-19 and cancer: First report of the ESMO international, registry-based, cohort study (ESMO CoCARE)

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Background

At the height of the first wave of the SARS-COV-2 pandemic, ESMO mobilized to accelerate research for the understanding of COVID-19 in cancer patients (pts). ESMO CoCARE is an international collaborative registry-based, cohort study, gathering real-world data and information from healthcare professionals about the natural history, treatment and outcomes of COVID-19 in cancer pts.

Methods

ESMO CoCARE captures information on pts with any solid or hematologic malignancy (including cancer survivors free of disease for ≥5 years) presenting with a COVID-19 diagnosis in any of the participating centers. Data collected since 06/2020 include demographics, cancer characteristics and status, co-morbidities, COVID-19 clinical features, course, management and outcome. Factors influencing COVID-19 severity (hospitalization +/- ICU support needed) and recovery are investigated using multivariable logistic regression with backward elimination method. The study is ongoing.

Results

The current analysis includes 1551 registered pts (19 countries; 87% pts from 23 European centers, 7% and 6% pts from 5 Northern African and 7 Asian centers), with COVID-19 diagnosis as of 11/03/2021. Median age was 64 years, with the majority female (52%), cancer stage III/IV (58%), and on active cancer treatment (60%). 65% had severe COVID-19 requiring hospitalization, with 11% receiving intensive care. In multivariable analysis, in addition to demographics (male gender, older age, other ethnicity than Caucasian, lower BMI), co-morbidities and symptomatic COVID-19, severe disease was associated to higher ECOG PS (Odds Ratio (OR)_{2 vs 0}=5.9, OR_{1 vs 0}=2.1), hematological malignancies (OR hemvs solid =2.0), and active/progressive cancer status (OR progressive vs no evidence of disease =1.6). 98% of pts with mild disease recovered, as opposed to only 70% of those with severe disease. Cancer stage was an additional prognostic factor for recovery (OR_{I/II vs IV} =3.4).

Conclusions

Demographic characteristics, type and status of cancer, and symptomatology of COVID-19 increase the probability of severe disease, while advanced cancer stage is also associated with the risk of death.

Legal entity responsible for the study

Institut Curie, Paris, France,

Funding

Disclosure

E. Romano: Financial Interests, Institutional, Funding, Investigator-initiated trial: AstraZeneca; Financial Interests, Institutional, Funding, Investigator-initiated trial: BMS; Financial Interests, Personal, Advisory Board: AstraZeneca; Financial Interests, Personal, Advisory Board: Merck; Financial Interests, Personal, Invited Speaker: Roche; Financial Interests, Personal, Invited Speaker: Pierre Fabre, R. Lee: Financial Interests, Personal, Invited Speaker: AstraZeneca; Financial Interests, Institutional, Funding: BMS. A. Croitoru: Financial Interests, Personal, Advisory Role: Ipsen; Financial Interests, Personal, Advisory Role: Astellas; Financial Interests, Personal and Institutional, Funding: Bristol-Myers Squibb; Financial Interests, Personal and Institutional, Funding: Merck; Financial Interests, Personal and Institutional, Funding: Astellas; Financial Interests, Personal and Institutional, Funding: Servier; Financial Interests, Personal and Institutional, Funding: Five Prime Therapeutics; Financial Interests, Personal and Institutional, Funding: Amgen; Financial Interests, Personal, Other, Travel funding: Merck; Financial Interests, Personal, Other, travel funding: Servier; Financial Interests, Personal, Other, travel funding: Roche, S. Susnjar: Financial Interests, Personal, Other, Honoraria and/or advisory fees: Roche; Financial Interests, Personal, Other, Honoraria and/or advisory fees: Pfizer; Financial Interests, Personal, Other, Honoraria and/or advisory fees: Novartis; Financial Interests, Personal, Other, Honoraria and/or advisory fees: AstraZeneca; Financial Interests, Personal, Other, Honoraria and/or advisory fees: Amicus. M. Rossi: Financial Interests, Personal, Other, travel and personal fees: Novartis; Financial Interests, Personal, Other, travel and personal fees: Ipsen. O.A. Michielin: Financial Interests, Personal, Other, personal fees: Bristol-Myers Squibb; Financial Interests, Personal, Other, personal fees: MSD; Financial Interests, Personal, Other, personal fees: Novartis; Financial Interests, Personal, Other, personal fees: Roche; Financial Interests, Personal, Other, personal fees: Amgen; Financial Interests, Personal, Other, personal fees: NeraCare GmbH. G. Pentheroudakis: Financial Interests, Personal, Advisory Board: Amgen; Financial Interests, Personal, Advisory Board: AstraZeneca; Financial Interests, Personal, Advisory Board: Bristol Myers Squibb; Financial Interests, Personal, Advisory Board: Lilly; Financial Interests, Personal, Advisory Board: Merck; Financial Interests, Personal, Advisory Board: MSD; Financial Interests, Personal, Advisory Board: Roche; Financial Interests, Institutional, Principal Investigator: AbbVie; Financial Interests, Institutional, Research Grant: Amgen; Financial Interests, Institutional, Principal Investigator, Coordinating PI: Amgen; Financial Interests, Institutional, Research Grant: AstraZeneca; Financial Interests, Institutional, Principal Investigator: AstraZeneca; Financial Interests, Institutional, Research Grant: Boehringer Ingelheim; Financial Interests, Institutional, Funding; Boehringer Ingelheim; Financial Interests, Institutional, Funding: Bristol Myers Squibb; Financial Interests, Institutional, Principal Investigator; Bristol Myers Squibb; Financial Interests, Institutional, Principal Investigator: Debbiopharm; Financial Interests, Institutional, Funding: Enorasis; Financial Interests, Institutional, Funding: Genekor; Financial Interests, Institutional, Funding: Ipsen; Financial Interests, Institutional, Principal Investigator: Ipsen; Financial Interests, Institutional, Funding; Janssen; Financial Interests, Institutional, Principal Investigator: Lilly; Financial Interests, Institutional, Funding: Merck; Financial Interests, Institutional, Principal Investigator: Merck; Financial Interests, Institutional, Funding: MSD; Financial Interests, Institutional, Principal Investigator: MSD; Financial Interests, Institutional, Funding: Pfizer; Financial Interests, Institutional, Principal Investigator: Roche; Financial Interests, Institutional, Research Grant: Roche; Financial Interests, Institutional, Funding: Sanofi; Financial Interests, Institutional, Principal Investigator, Coodinating Pi: Servier; Financial Interests, Institutional, Funding: Servier. S. Peters: Consultation / Advisory role: AbbVie, Amgen, AstraZeneca, Bayer, Beigene, Biocartis, Bio Invent, Blueprint Medicines, Boehringer Ingelheim, Bristol-Myers Squibb, Clovis, Daiichi Sankyo, Debiopharm, Eli Lilly, Elsevier, F. Hoffmann-La Roche/Genentech, Foundation Medicine, Illumina, Incyte, IQVIA, Janssen, Medscape, Merck Sharp and Dohme, Merck Serono, Merrimack, Mirati, Novartis, PharmaMar, Phosplatin Therapeutics, Pfizer, Regeneron, Sanofi, Seattle Genetics, Takeda, Vaccibody. Talk in a company's organized public event: AstraZeneca, Boehringer Ingelheim, Bristol-Myers Squibb, e-cancer, Eli Lilly, F. Hoffmann-La Roche/Genentech, Illumina, Medscape, Merck Sharp and Dohme, Novartis, PER, Pfizer, Prime, RTP, Sanofi, Takeda, Receipt of grants/research supports: (Sub)investigator in trials (institutional financial support for clinical trials) sponsored by Amgen, AstraZeneca, Biodesix, Boehringer Ingelheim, Bristol-Myers Squibb, Clovis, F. Hoffmann-La Roche/Genentech, GSK, Illumina, Lilly, Merck Sharp and Dohme, Merck Serono, Mirati, Novartis, and Pfizer, Phosplatin Therapeutics. All other authors have declared no conflicts of interest.

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