

COVID AND CANCER: HOW ARE WE DOING?

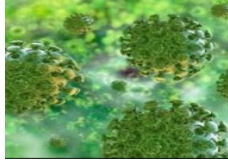
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COVID AND CANCER

1. Communication

2. Safety:

- Keeping Cancer Patients on Treatment
- Triple Check before entering Oncology Day Unit
- COVID swab prior to admission into hospital
- Change in triage from ODU to ED or Direct Admission



COVID AND CANCER

Incidence:

Severity:

Treatment:

Complications:

Vaccinations:

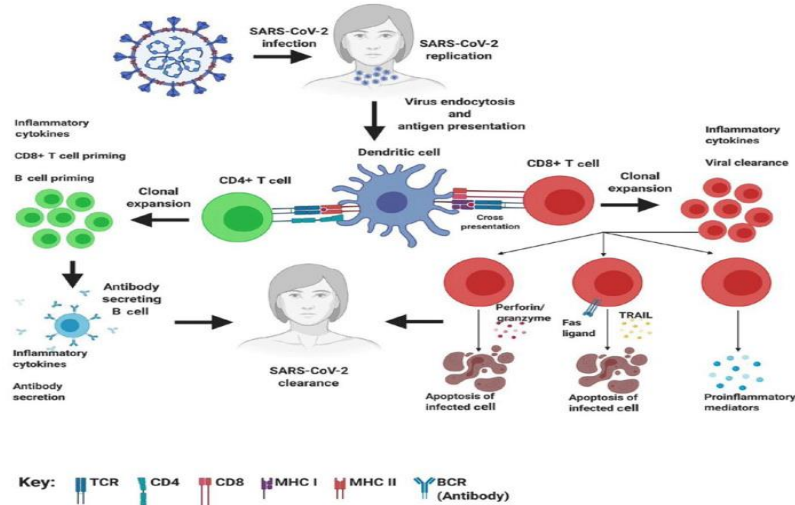
COVID infections in people with cancer

Infections in Cancer patients

Starting / Holding / Weighing Outcomes

VTE in Cancer Patients

Cancer Patients and Vaccination



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INCIDENCE

- Slightly higher risk when controlling for age and co-morbidities
- Incidence: 1-8% (Studies from China, Australia, Spain, The VA Hospitals)
- Ireland Population Incidence: .015 (Cases per 100,000 14 day period to 14.1.21)
- Beacon Experience: 10 patients, 6000 Oncology Day Unit Visits, 10 months
- Higher risk groups:
 - Recently Diagnosed
 - Hematologic and Lung Cancers



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SEVERITY

- All cause mortality was higher: RR 1.66. (8 studies: 37,000 patients)
- ICU admission was higher: RR 1.56. (26 studies: 15,000 patients)
- UK Study. (17 M individuals, 10,000 deaths from COVID-19)
 - Cancer diagnosed within 1 year, 1.8 fold higher risk of death
 - Haematologic Malignancy, 4 fold risk of death
 - Risk of death higher than population to 5 years post-diagnosis of cancer
 - After 5 years, risk of death remains high in haematologic malignancy.

In contrast: 2 studies report that AGE > 50, OBESITY are the factors associated with significantly worse outcomes.

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TREATMENT: STARTING / HOLDING, WHAT ARE THE OUTCOMES?

- Direct Mortality: COVID-19
- Indirect Impact on other health conditions: Cancer
- What is the effect of treatment delay on survival?

WHAT IS HAPPENING?

Reduction in patients seeking help for symptoms
Decline in Referrals
Delays in Diagnostic Services
Staff Redeployed, ICU's Full, Cleaning Protocols

OUTCOME OF DELAYS:

Increase risk of death with every 4 week delay
Delays in treatment days and changing treatment schedules not yet quantified

RESEARCH



OPEN ACCESS



FAST TRACK

Mortality due to cancer treatment delay: systematic review and meta-analysis

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ABSTRACT

OBJECTIVE

To quantify the association of cancer treatment delay and mortality for each four week increase in delay to inform cancer treatment pathways.

DESIGN

Systematic review and meta-analysis.

DATA SOURCES

Published studies in Medline from 1 January 2000 to 10 April 2020.

ELIGIBILITY CRITERIA FOR SELECTING STUDIES

1.08 (eg, colectomy 1.06, 95% confidence interval 1.01 to 1.12; breast surgery 1.08, 1.03 to 1.13). Estimates for systemic treatment varied (hazard ratio 1.01-1.28). Radiotherapy estimates were for radical radiotherapy for head and neck cancer (hazard ratio 1.09, 95% confidence interval 1.05 to 1.14), adjuvant radiotherapy after breast conserving surgery (0.98, 0.88 to 1.09), and cervix cancer adjuvant radiotherapy (1.23, 1.00 to 1.50). A sensitivity analysis of studies that had been excluded because of lack of information on comorbidities or functional status did not change the findings.

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Meta-Analysis: retrospective observational comparison

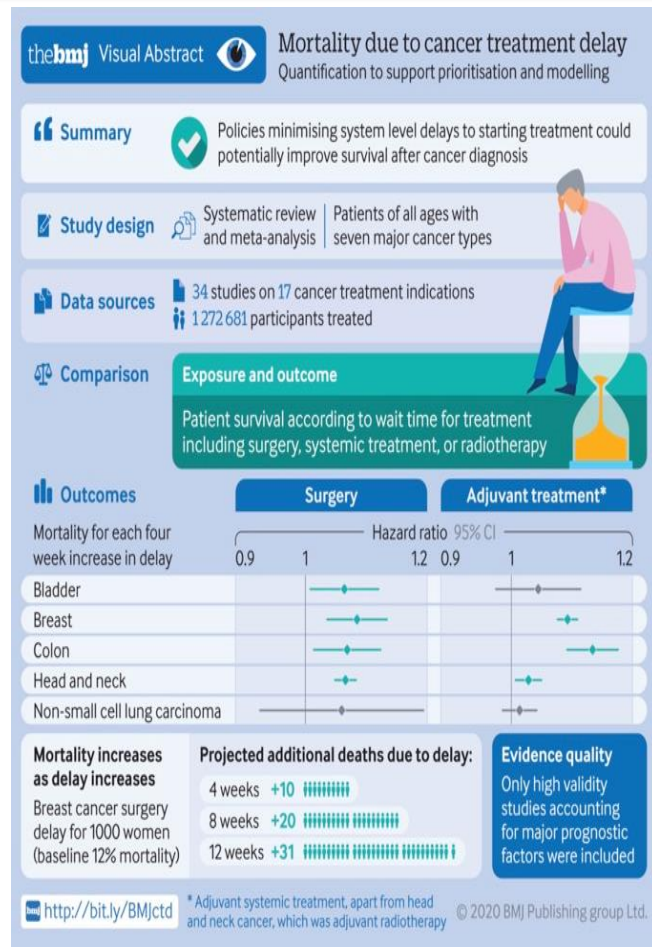
- 2543 studies -> 34 included
- 1,272,681 patients across 7 cancers

Across all 3 modalities, a 4 week delay:

- -Surgery: 6-8% increased risk of death
- -Breast Surgery 8 week delay: 17% increase
- -Chemo/Radiation: 9-13% increase risk of death

UKNHS Surgical Priority Algorithm (Pandemic)

- -Delay all colorectal surgery 10 -12 weeks
- -BMJ study reports this delay increased risk of death 9%
- Informing Cancer Policy
- Addressing Cancer Services



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Vaccinations: YES!

COVID VACCINE

1. Cancer Patients: Priority Group 5,7
2. Efficacy in cancer patients not fully known
3. Not Live Vaccines
4. Vaccinate: Before start of Treatment
5. Vaccinate: Between cycles when blood counts have maximally recovered
6. Vaccinate 7 days before surgery
7. Wait 14 days to 6-8 weeks before giving other vaccines



Appendix 1: Suggested timings for Covid-19 vaccination for patients on systemic anticancer therapy (SACT) treatment

(Adapted from Guys and St Thomas's NHS Foundation Trust Clinicians FAQs v1.0)

SACT	Suggested Timing
Cytotoxic Chemotherapy	When blood counts have maximally recovered (towards end of cycle) - avoid on same day of chemotherapy
Monoclonal Antibodies (single agent) should not be a contraindication*	No specific timing issues (providing FBC is normal/acceptable range)
Monoclonal Antibodies (with cytotoxic chemotherapy)	When blood counts have maximally recovered (towards end of cycle) - avoid on same day of chemotherapy
Immunotherapy (IO) single agent	No specific timing issues (providing FBC is normal/acceptable range)
Immunotherapy (IO) with cytotoxic chemotherapy	When blood counts have maximally recovered (towards end of cycle) where possible avoid on same day of chemotherapy
Small molecule tyrosine kinase inhibitors (TKIs)	No specific timing issues (providing FBC is normal/acceptable range)
Immunomodulatory (IMiDs)	When blood counts have maximally recovered (towards end of cycle) - avoid on same day of chemotherapy
Protein Kinase Inhibitors e.g. bortezomib, ixazomib	When blood counts have maximally recovered (towards end of cycle) - avoid on same day of chemotherapy
PARP inhibitors e.g. olaparib, rucaparib	No specific timing issues (providing FBC is normal/acceptable range)
CDK4/6 inhibitors e.g. abemaciclib, ribociclib, palbociclib	When blood counts have maximally recovered (towards end of cycle) - avoid on same day of chemotherapy
Hormone treatments and other supportive treatments	No specific timing issues
High dose steroids (prednisolone $\geq 2\text{mg/kg/day}$ or equivalent)	No specific timing issues
*CD-20 monoclonal antibodies e.g. Rituximab	No specific timing issues - when blood counts are optimal. Where clinically possible vaccine should be given 4 weeks or more before rituximab. There may be a suboptimal response to the vaccine especially in patients within 6 months of their last dose rituximab or those on maintenance treatment.

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Be **READY** for #coronavirus

WHO is giving advice on how to protect ourselves & others:

1. Be **SAFE** from coronavirus infection
2. Be **SMART** & inform yourself about it
3. Be **KIND** & support one another

Learn more about #COVID19 & share with your loved ones: www.who.int/COVID-19



"Be fast, have no regrets... If you need to be right before you move, you will never win"....the greatest error is not to move....

Dr. Mike Ryan, WHO epidemiologist at WHO, in March.



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Thank you