

Case Report Form CovidSurg-Cancer-Breast  
NB: Additional data points may be required for specific cancer types

Patient REDCap ID: \_\_\_\_\_

Age: 0-4w | 4-52w | 1-9y | 10-16y | 17-19y | 20-29y | 30-39y | 40-49y | 50-59y | 60-69y | 70-79y | 80-89y | 90y+ Sex: Female | Male ASA  
Grade: 1 | 2 | 3 | 4 | 5 Weight (<52 weeks only): \_\_\_\_\_ kg  
WHO/ECOG Performance status: 0 | 1 | 2 | 3 | 4 | 5 | Unknown  
BMI: \_\_\_\_\_

☐ Underweight (<18.5)  
☐ Normal/healthy weight (18.5-24.9)  
☐ Overweight (25-29.9)  
☐ Moderately obese (30-34.9)  
☐ Severely obese (35-39.9)  
☐ Very severely obese (≥40)

Comorbidities:  
☐ Current smoker  
☐ Asthma  
☐ Current cancer disease  
☐ CKD (Moderate/Severe)  
☐ COPD  
☐ Congenital abn (cardiac)  
☐ Congenital abn (non cardiac)  
☐ Congestive heart failure  
☐ Dementia  
☐ Diabetes Mellitus  
☐ Hypertension  
☐ Myocardial Infarction  
☐ Peripheral Vascular Dis  
☐ Stroke/TIA  
☐ Other: \_\_\_\_\_

Cancer-specific details:  
Cancer type  
☐ Ductal carcinoma in situ  
☐ Invasive carcinoma

Menopausal status  
☐ Pre-menopausal  
☐ Post-menopausal  
☐ Unknown

DCIS grade  
☐ High grade  
☐ Low grade  
☐ Intermediate grade  
☐ Mixed

Oestrogen receptor status  
☐ Positive  
☐ Negative  
☐ Unknown

Progesterone receptor status  
☐ Positive  
☐ Negative  
☐ Unknown

HER2 status  
☐ Positive  
☐ Negative  
☐ Unknown

Date of cancer diagnosis: \_\_\_\_/\_\_\_\_/\_\_\_\_  
Date of decision for curative surgery: \_\_\_\_/\_\_\_\_/\_\_\_\_

Was the initial MDT (tumour board) decision for primary surgical treatment?

Yes – decision for surgical Rx (optimal treatment option) | Yes – decision for surgical Rx (compromised option due to COVID-19) | No – decision for non-surgical Rx (optimal treatment option) | No – decision for non-surgical Rx (compromised option due to COVID-19)

Did the patient have an operation related to this cancer during the 3-month study window? No / Yes

If a cancer operation WAS performed:  
Date of surgery: \_\_\_\_/\_\_\_\_/\_\_\_\_

Op performed in: Dedicated COVID-free hospital | Dedicated COVID Rx hospital | Undesignated hospital type with ED | Undesignated hospital type without ED | Other: \_\_\_\_\_

COVID-19 CRITCON level: 0 | 1 | 2 | 3 | 4 | 5  
Urgency of surgery: Immediate | Urgent | Expedited | Elective

Did the patient have a \*resolved\* COVID-19 infection before the time of surgery? Yes – lab test/CT thorax | Clinical suspicion | No  
Was COVID-19 screening performed preoperatively?  
Laboratory test | CT thorax | Other: \_\_\_\_\_  
Did patient have mandatory self-isolation before surgery?  
Yes, > 2 weeks | Yes - < 2 weeks | No  
COVID-19 suspected at time of surgery? Yes | No  
Tests performed to investigate SARS-CoV-2 status:

	CT (neg)	CT (pos)	Swab (neg)	Swab (pos)
4-7 days prior surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-3 days prior surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If a cancer operation WAS performed:

If emergency cancer surgery was required, why?  
☐ Bleeding  
☐ Sepsis  
☐ Tumour progression  
☐ Other: \_\_\_\_\_

Anaesthesia: Local | Regional | General  
Surgical intent: Curative | Palliative

Did this represent a change to your typical operative approach in the pre-COVID-19 era?

☐ No change to operative approach  
☐ Yes, chose to avoid minimally invasive surgery related to COVID  
☐ Yes, chose to avoid open surgery related to COVID  
Surgical intent: Curative | Palliative

Environment in which patient cared for:

Operative theatre – Designated COVID theatre | Designated non-COVID theatre | No designation for theatre

ITU – Designated COVID treatment area | Designated non-COVID treatment area | No designation for this area

Postop ward– Designated COVID ward| Designated non-COVID ward| No designation for this ward

What would have the adjuvant therapy typically given?  
☐ Chemotherapy  
☐ Radiotherapy  
☐ Endocrine therapy

Which of the following operation components were performed?  
Please select all that apply.

Mastectomy (R.Breast) | Mastectomy (L.Breast) | Wide local excision (R.Breast) | Wide local excision (L.Breast) | Sentinel node biopsy (R.Breast) | Sentinel node biopsy (L.Breast) | Axillary clearance (R.Breast) | Axillary clearance (L.Breast) | Immediate breast reconstruction/oncoplasty (R.Breast) | Immediate breast reconstruction/oncoplasty (L.Breast) | Other: \_\_\_\_\_

If no immediate breast reconstruction/mammoplasty was performed, why was this?

Not indicated | Delayed, due to COVID-19 | Delayed, not due to COVID-19

Nottingham Prognostic Index: \_\_\_\_\_

Oncotype score: \_\_\_\_\_

Oncotype category:  
High risk | Moderate risk | Low risk | Unknown

Post-operative histology:

T stage: T1 | T2 | T3 | T4 | unknown

N stage: N0 | N1 | N2 | unknown

M stage: M0 | M1 | unknown

Resection margin status: R0 – margins cleared | R1 – margins involved

Did any change to treatment occur due to the COVID-19 pandemic (operated patients)?  
No change to care, no neoadjuvant Rx | No change – neoadjuvant equivalent to pre-COVID | Delay to definitive Rx | Expedited definitive surgery | Change in choice of operation | Op performed in alt. hospital | IR procedure before surgery, not typically indicated | Neoadj treatment, not typically indicated | No Neoadj, typically indicated | Neoadj treatment longer than typical | Neoadj treatment shorter than typical | Adj treatment, not typically indicated | No adj, typically indicated | Other: \_\_\_\_\_

Details of neoadj Rx: \_\_\_\_\_

COVID-19 post-operatively (30 days): Yes – lab test | Yes – CT thorax | Yes– clinical only | No

If yes: Inpatient | Required Admission | Community

Mortality: Died on table | d0-7 | d8-30 |

Alive still in hosp 30d | transferred | discharged to rehab | discharged home Re-operation: Yes | No

COVID-19 post-operatively (30 days): Yes – lab test | Yes – CT thorax | Yes– clinical only | No

If yes: Inpatient | Required Admission | Community

Mortality: Died on table | d0-7 | d8-30 |

Alive still in hosp 30d | transferred | discharged to rehab | discharged home

Re-operation: Yes | No

Post-op intensive care: No | planned from theatre | unplanned from theatre | unplanned from ward

(If no/unplanned from ward): Would post-operative ICU bed have been planned pre-COVID-19 era? Yes, not available ~ COVID| Yes, not available (other)| No

Total length of hospital stay: \_\_\_\_days

Did surgeons contract COVID-19 (30-days): Yes | No

If a cancer operation WAS performed:

Complications:

<input type="checkbox"/> Acute kidney injury	<input type="checkbox"/> Pneumonia
<input type="checkbox"/> ARDS	<input type="checkbox"/> Respiratory failure
<input type="checkbox"/> Anastomotic leak	<input type="checkbox"/> Sepsis
<input type="checkbox"/> Blood transfusion	<input type="checkbox"/> Septic shock
<input type="checkbox"/> Cardiac arrest	<input type="checkbox"/> Stroke/TIA
<input type="checkbox"/> Coma >24h	<input type="checkbox"/> SSI superficial/deep
<input type="checkbox"/> Deep Vein Thrombosis	<input type="checkbox"/> SSI organ space
<input type="checkbox"/> Graft/prosthesis/flap fail	<input type="checkbox"/> UTI
<input type="checkbox"/> Myocardial infraction	<input type="checkbox"/> Wound dehiscence

If NO operation was performed (by 3 months from study entry)

Is there still a plan for curative surgery? Yes | No

Why was no operation performed in the 3 months?

If still plan for surgery:

☐ Patient choice to avoid surgery during pandemic  
☐ MDT decision to delay surgery due to risk to patient  
☐ Ongoing neoadjuvant treatment  
☐ No bed / intensive care space / theatre space  
☐ Change of recommendations in society guidelines related to COVID-19  
☐ Other: \_\_\_\_\_

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If no ongoing plan for surgery:

- ☐ Patient choice to avoid surgery during pandemic
- ☐ MDT decision to delay surgery due to risk to patient
- ☐ Disease progression, surgery no longer indicated
- ☐ Change in clinical status unrelated to cancer e.g. MI
- ☐ Died awaiting surgery
- ☐ Change of recommendations in society guidelines
- ☐ Other: \_\_\_\_\_

Has the cancer been **re-staged**? No | Yes

If so, date \_\_\_\_/\_\_\_\_/\_\_\_\_

**Did any change to treatment occur due to the COVID-19 pandemic** (non-operated patients)?

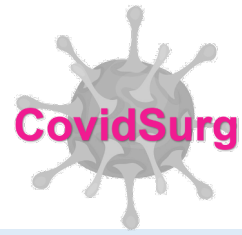
No change to care – delayed/cancelled other reason |  
Operation cancelled because of COVID-19 | Operation  
delayed because of COVID-19 | Change in Rx strategy | IR  
procedure before/instead of surgery, not typically indicated  
| Neoadj treatment, not typically indicated | No Neoadj,  
typically indicated | Neoadj treatment longer than typical |  
Neoadj treatment shorter than typical | Less access to  
staging procedures | Less access to staging investigations  
| Other \_\_\_\_\_



NIHR Global Health Research Unit on  
Global Surgery

## Case Report Form CovidSurg

NB: Complete this CRF only for patients that are  
eligible for **both** studies (operated cancer patients  
with COVID-19 infection)



Patient REDCap ID: \_\_\_\_\_

### COVID-19 Patient Information

#### BCG/Tuberculosis(TB) status

Vaccine - <15yrs ago | Vaccine – 15>yrs ago | TB diagnosis  
<15yrs ago | TB diagnosis >15yrs ago | Close contact with  
individual with known TB <15yrs ago | Close contact with  
individual with known TB >15yrs ago | No previous BCG  
vaccine/TB exposure | BCG vaccination/TB exposure  
unknown

#### Findings at admission:

- ☐ Abdominal pain
- ☐ Dyspnoea
- ☐ Cough
- ☐ Diarrhoea
- ☐ Fatigue
- ☐ Fever >38C
- ☐ Haemoptysis
- ☐ Myalgia
- ☐ Nausea/vomiting
- ☐ Sputum
- ☐ Other: \_\_\_\_\_

### COVID-19 Preoperative Investigations

#### Last available data from before surgery:

Resp rate: \_\_\_\_\_ rpm Heart rate: \_\_\_\_\_ bpm

Systolic BP: \_\_\_\_\_ mmHg Diastolic BP: \_\_\_\_\_ mmHg

#### Tests performed to investigate SARS-CoV-2 status:

	CT (neg)	CT (pos)	Swab (neg)	Swab (pos)
4-7 days prior surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1-3 days prior surgery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Day of surgery (preop)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
After surgery (during index admission)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
After discharge from index admission (within 30 days of surgery)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### How was SARS-CoV-2 confirmed?

- ☐ Positive swab – result received before surgery
- ☐ Positive swab – result received after surgery
- ☐ CT scan of chest confirming COVID-19 – before surgery
- ☐ CT scan of chest confirming COVID-19 – after surgery
- ☐ Clinical diagnosis/chest X-Ray – before surgery
- ☐ Clinical diagnosis/chest X-Ray – after surgery

### Pre-op investigations:

Haemoglobin: \_\_\_\_\_ g/L WCC: \_\_\_\_\_ 10<sup>9</sup>/L CRP: \_\_\_\_\_ mg/L

#### Pre-op x-ray:

- ☐ Not performed
- ☐ Yes- normal
- ☐ Yes- abnormal

#### Pre-op chest CT:

- ☐ Not performed
- ☐ Yes- normal
- ☐ Yes- consolidation
- ☐ Yes- ground glass opacity
- ☐ Yes- pulmonary infiltration
- ☐ Yes- other abnormality

### Management

#### Time from admission to operation (pre-op delay)

<6 hrs | 6-23 hrs | 24-47 hrs | 48-71 hrs | 72+hrs

#### COVID-19 Treatment

Did patient receive NSAIDs? No | Yes before admission  
| After admission | Both

#### Patient received during index admission?

- ☐ Antibiotics
- ☐ Antivirals
- ☐ Quinine/derivative
- ☐ Corticosteroids
- ☐ IV Immunoglobulins
- ☐ Interferon
- ☐ IL-6 blocker

Antiviral (name & dose): \_\_\_\_\_

Corticosteroid (name & dose): \_\_\_\_\_

#### Renal dialysis during index admission?

No | Yes but not at 30 days after surgery  
Yes and ongoing dialysis at 30 days after surgery

#### Pre-op respiratory support:

- ☐ None
- ☐ Low-flow O2
- ☐ High-flow O2
- ☐ Non-invasive ventilation
- ☐ Invasive vent
- ☐ ECMO

#### Post-op respiratory support:

- ☐ None
- ☐ Low-flow O2
- ☐ High-flow O2
- ☐ Non-invasive ventilation
- ☐ Invasive vent
- ☐ ECMO

#### Duration of post-op mechanical ventilation:

1-23h | 24-47h | 48-71h | 72-167h | 168h+