

Procalcitonin Evaluation of COVID-19 Hospitalised patients (PEACH): protocol for a retrospective observational study.

Supplementary File

Table S1 –Variables to be collected for analysis.

Variable	Measure	Reason
Day 1	Date of COVID-19 diagnosis	To define reference point for analysis and to define 'baseline' (Day 1 +/- 1 day) for variable collection at time of diagnosis
Age	Age category: <ul style="list-style-type: none"> • 16-49 • 50-59 • 60-69 • 70-79 • >80 	Confounding factor, describe study population (Exploratory analysis)
Ethnicity	Category: <ul style="list-style-type: none"> • White: Welsh/English/Scottish/Northern Irish/British • White: Irish • White: Gypsy or Irish Traveller • White: Any other White background • Mixed/Multiple ethnic groups: White and Black Caribbean • Mixed/Multiple ethnic groups: White and Black African • Mixed/Multiple ethnic groups: White and Asian • Mixed/Multiple ethnic groups: Any other Mixed / Multiple ethnic background • Asian/Asian British: Indian • Asian/Asian British: Pakistani, • Asian/Asian British: Bangladeshi • Asian/Asian British: Chinese, • Asian/Asian British: Any other Asian background • Black / African / Caribbean / Black British: African • Black / African / Caribbean / Black British: Caribbean 	Baseline Characteristics

	<ul style="list-style-type: none"> Black / African / Caribbean / Black British: Any other Black / African / Caribbean background Other ethnic group: Arab Any other ethnic group 	
Sex	Male/female	Baseline Characteristics
Height and Weight	(i) Height and date measured (ii) Weight and date measured	Baseline Characteristics
Comorbidity	(i) Quality Outcome Framework registered conditions (ii) Primary Care Frailty Scores: 1 Very Fit 2 Well 3 Managing well 4 Vulnerable 5 Mildly Frail 6 Moderately Frail 7 Severely Frail 8 Very Severely Frail 9 Terminally Ill (iii) Penicillin allergy or sensitivity status: <ul style="list-style-type: none"> Yes No Unknown 	Confounding factors (Baseline Characteristics)
Smoking status	Category: <ul style="list-style-type: none"> No Yes Ex-Smoker Not Known 	Baseline Characteristics
Index of multiple deprivation (IMD)	(i) IMD - Score (ii) IMD - Rank (iii) IMD – Decile	Confounding factor (Exploratory analysis)
Antibiotics/Antivirals used during treatment of episode	(i) Agent (ii) Dose (iii) Route (iv) Frequency (v) Start date (vi) Stop date	Primary and secondary outcomes - Used to derive: days and DDDs of ‘early’, ‘late’ and total antibiotic treatment.
Date of hospital admission/discharge	(i) Date of hospital admission and discharge (ii) Date of ICU admission and discharge (iii) Date of death	Secondary outcomes - Used to derive: days - length of hospital stay, ICU length of stay, and mortality rates (Survival time).
Resuscitation status and level of care preference	Categories: (i) Documented decision about resuscitation status: <ul style="list-style-type: none"> Yes/No (ii) Documented decision regarding level of care: <ul style="list-style-type: none"> Yes/No 	Confounding factor

	(iii) Decision in the event of a cardiorespiratory arrest: <ul style="list-style-type: none"> • No (do not resuscitate) • Yes (resuscitate) 	
Presence and location of consolidation/ ground glass changes on lung imaging	(i) COVID-19 categorisation of imaging: <ul style="list-style-type: none"> • X-ray uncoded • Definite (CVCX1) • Normal (CVCX0) • Indefinite (CVCX2) • Typical (non-COVID CVCX3) (ii) Date of Baseline Imaging (iii) Date of imaging where new/worsening consolidation identified	Confounder and secondary outcomes – Dates used to derive: Time to new consolidation
Physiological observations at time of diagnosis (day 1 = Positive COVID-19 test date)	(i) Respiratory rate (ii) Systolic blood pressure (iii) Pulse rate (iv) ACVPU (v) Glasgow coma score (vi) Temperature (vii) Oxygen saturation (viii) Oxygen requirement (was supplemental oxygen given?)	Confounding factor - Used to derive: (i) qSOFA (ii) NEWS2 score (iii) CURB-65 scores (iv) 4C mortality score
Laboratory tests:	(i) Positive COVID-19 test date (day 1) (ii) PCT test date	Primary Outcome - Week of test date. Secondary Outcome - Study test, within 3 days of COVID test for inclusion in PCT group
Laboratory tests	At baseline (day 1 or +/- 1 day COVID-19 positive test date): <ul style="list-style-type: none"> • Urea • C-reactive protein • Troponin • Ferritin • D-dimer • White cell count • Lymphocyte count • Neutrophil count • Haemoglobin • Platelets Day 1, day 2 and day 3: <ul style="list-style-type: none"> • Creatinine • AKI stage 	Confounding factors (Exploratory analysis)
Laboratory tests	Microbiology at baseline (day 1 or +/- 1 day COVID-19 positive test date) or	Secondary Outcomes -

	follow-up. Results and date of sampling for: (i) Blood culture (ii) Respiratory (Bronchoscopy/BAL cultures) (iii) Sterile site culture	Used to derive resistant bacterial infection rates and time to event.
Laboratory tests	(i) GDH ELISA results (ii) <i>C. difficile</i> toxin and toxin gene testing results (iii) Presence of Respiratory virus or secondary viral infection	Secondary Outcomes