RECOVERY

Randomised Evaluation of COVID-19 Therapy

Alastair Green and David Ferguson

Northumbria Healthcare

Where it all began

Northumbria Healthcare NHS Foundation Trust

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- 14/3 – happened to bump into the director of R and D
- 23/3 – email from R and D team with some information about the trial
  - PANIC and a fair amount of swearing – we'll come back to this
- 27/3 – first randomisation!
  - Slightly less panic but a similar amount of swearing

The Process

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1. Identify potential patients
2. Consent and randomise
   - At this point recognise potential arms that were not suitable for the patient prior to randomisation
3. Prescribe the treatment that the patient is randomised to
   - Protocolised on our EPMA system
4. Supply the medication to the patient on a named patient basis
   - Small supplies of each on wards so treatment could be started ASAP

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The Challenges

1. Identify potential patients
   - The goalposts kept moving
2. Consent and randomise
   - Patient specific issues meant not all arms were suitable for all patients
     - Interactions, administration difficulties, pre-existing conditions
3. Prescribe the treatment that the patient is randomised to
   - Not as straight forward as it sounds!
4. Supply the medication on a named patient basis
   - Ward and pharmacy staff apprehensive unfamiliar with clinical trials

The Solutions

TRIAL14 - RECOVERY

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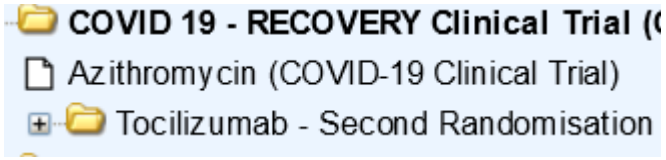
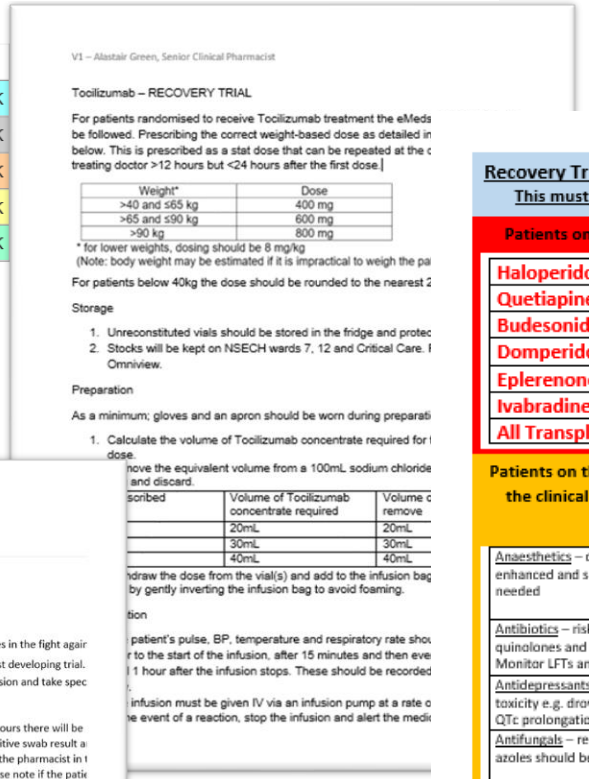


Omni Site/ID	Omni Name	Area	Number in Stock	Unit
NSRXAMB	NSECH Ward 7	NSEC07	99963.00	PACK
NSRXRESP	NSECH Ward 12 Respiratory	NSEC12R	99992.00	PACK
NSRXCRIT	NSECH Critical Care	NSECCRIT	99988.00	PACK
NTRXWD12	NTGH Ward 12	NTGH12	10000.00	PACK
WGRX02	WGH Ward 2	WANS02	99997.00	PACK


V1 – Alastair Green, Senior Clinical Pharmacist

Tocilizumab – RECOVERY TRIAL

For patients randomised to receive Tocilizumab treatment the eMeds be followed. Prescribing the correct weight-based dose as detailed in below. This is prescribed as a stat dose that can be repeated at the treating doctor >12 hours but <24 hours after the first dose.

Weight*	Dose
>40 and ≤65 kg	400 mg
>65 and ≤90 kg	600 mg
>90 kg	800 mg

* for lower weights, dosing should be 8 mg/kg
(Note: body weight may be estimated if it is impractical to weigh the pa

For patients below 40kg the dose should be rounded to the nearest 2

Storage

1. Unreconstituted vials should be stored in the fridge and protec
2. Stocks will be kept on NSECH wards 7, 12 and Critical Care. I Omniview.

Preparation

As a minimum; gloves and an apron should be worn during preparati

1. Calculate the volume of Tocilizumab concentrate required for dose.

scribed	Volume of Tocilizumab concentrate required	Volume remove
	20mL	20mL
	30mL	30mL
	40mL	40mL

hdraw the dose from the vial(s) and add to the infusion bag by gently inverting the infusion bag to avoid foaming.

tion

patient's pulse, BP, temperature and respiratory rate shou to the start of the infusion, after 15 minutes and then eve 1 hour after the infusion stops. These should be recorded

infusion must be given IV via an infusion pump at a rate o e event of a reaction, stop the infusion and alert the medi

COVID-19 Treatment & Research Trials

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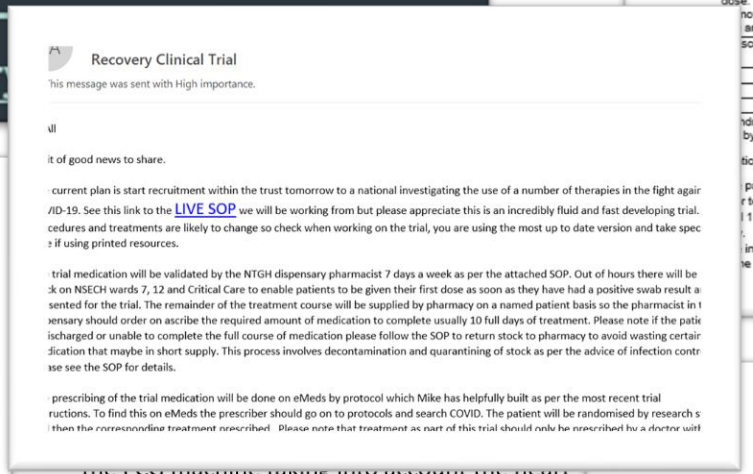
Research – COVID-19 – Recover


Recovery Clinical Trial

his message was sent with High importance.

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it of good news to share.

current plan is start recruitment within the trust tomorrow to a national investigating the use of a number of therapies in the fight agair /ID-19. See this link to the LIVE SOP we will be working from but please appreciate this is an incredibly fluid and fast developing trial. cedures and treatments are likely to change so check when working on the trial, you are using the most up to date version and take spec e if using printed resources.

trial medication will be validated by the NTGH dispensary pharmacist 7 days a week as per the attached SOP. Out of hours there will be k on NSECH wards 7, 12 and Critical Care to enable patients to be given their first dose as soon as they have had a positive swab result a sented for the trial. The remainder of the treatment course will be supplied by pharmacy on a named patient basis so the pharmacist in t ensary should order on ascribe the required amount of medication to complete usually 10 full days of treatment. Please note if the patie ischarged or unable to complete the full course of medication please follow the SOP to return stock to pharmacy to avoid wasting certain dication that maybe in short supply. This process involves decontamination and quarantining of stock as per the advice of infection contr ase see the SOP for details.

prescribing of the trial medication will be done on eMeds by protocol which Mike has helpfully built as per the most recent trial ructions. To find this on eMeds the prescriber should go on to protocols and search COVID. The patient will be randomised by research s then the corresponding treatment prescribed. Please note that treatment as part of this trial should only be prescribed by a doctor with

What is it?

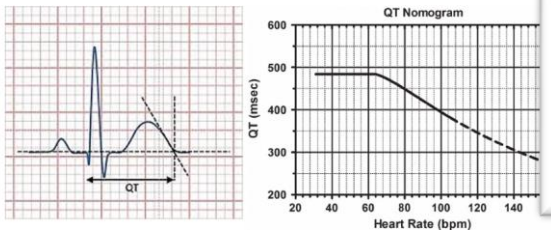
https://www.recoverytrial.net/

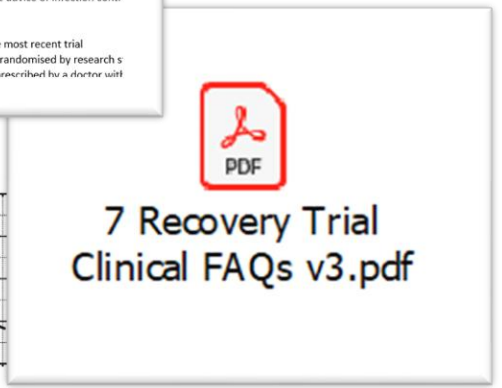
All Covid patients in hospital and >18 – swabbed or high clinical suspicion

Consented by a medic and randomised into a treatment arm by the research nurses

Then an email goes to the NTGH dispensary email stating; where the patient is and what treatment they should get.

rate when looking at the raw QT.





Recovery Trial – Lopinavir/Ritonavir Pre-Randomisation Interaction Checker

This must be consulted prior to requesting randomisation to the Recovery Trial

Patients on these drugs are NOT suitable for randomisation to Lopinivir/ Ritonivir

Haloperidol	Ranolazine	Ticagrelor	Amiodarone
Quetiapine	Sildenafil	Carbamazepine	Disopyramide
Budesonide (oral)	Sirolimus	Phenytoin	Flecainide
Domperidone	Apixaban	Phenobarbital	Quinidine
Eplerenone	Clopidogrel	Primidone	Erythromycin
Ivabradine	Rivaroxaban	St John's Wort	Rifampicin
All Transplant medication		All Chemotherapy	

Patients on these drugs MAY be suitable for randomisation to lopinavir/ ritonavir but the clinical situation must be considered and a management plan documented to monitor the interaction. Contact a pharmacist for advice.

Anaesthetics – drug effects enhanced and smaller doses may be needed	Analgesics – enhanced effects of strong opiates. Monitor for toxicity e.g. respiratory depression, excessive drowsiness	Antiarrhythmics – monitor for digoxin toxicity e.g. nausea, visual disturbances, bradycardia. Levels may be needed
Antibiotics – risks with macrolides, quinolones and metronidazole. Monitor LFTs and QTc	Anticoagulants – monitor for signs of bleeding and daily INRs needed with warfarin	Anticonvulsants – monitor for signs of toxicity. Levels may be needed
Antidepressants – monitor for toxicity e.g. drowsiness, nausea, QTc prolongation	Antidiabetics – risk of hypoglycaemia with sulfonylureas. Monitor BMs	Antiemetics – lower starting doses should be used
Antifungals – reduced doses of azoles should be used	Antihypertensives – calcium channel blocker and beta blocker effects may be enhanced	Antipsychotics – increased risk of side effects from antipsychotics. Monitor for signs of movement disorders and QTc
Anxiolytics – enhanced sedative effect, lower doses may need to be used	Bronchodilators – monitor for aminophylline and theophylline toxicity e.g. nausea/ vomiting and tachycardia	Diuretics – diuretic effect may be enhanced. Electrolyte and fluid status monitoring needed
Immunosuppression – should be discussed with the speciality responsible for the immunosuppression	Lipid lowering therapies – statins should be held for the duration of trial medication plus 2 days	Steroids – effects of oral/ parenteral steroids will be enhanced. This is unlikely to be clinically significant for inhaled steroids

The decision to randomise any patient remains the responsibility of the attending clinician. If you are unsure on whether your patient is suitable for randomisation to the lopinavir/ ritonavir arm seek pharmacy/ clinical trials advice.

Patients unsuitable for lopinavir/ ritonavir can be randomised to other arms within the Recovery Trial.

Prepared by Alastair Green – Senior Clinical Pharmacist 07/05/2020

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The Result

- Positive and negative results from the trial – all useful
- Positive relationship built with trust R and D team
- Pharmacy and wider staff less scared of trials

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Coronavirus: Dexamethasone proves first life-saving drug

By Michelle Roberts
Health editor, BBC News online

16 June 2020 | 2471 Share

Coronavirus pandemic

Thanks for listening

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