SUMMARY GUIDELINES FOR ANTICIPATORY MEDICATION (JUST IN CASE DRUGS) FOR THE MANAGEMENT OF SYMPTOMS IN THE LAST DAYS OF LIFE THESE ARE GUIDELINES ONLY – EACH PATIENT'S NEEDS MUST BE CONSIDERED INDIVIDUALLY

Indication	Medicine	Dose	Frequency	Max 24 hr dose to be given PRN	Route	Usual vial strength and size	NOTES
	PRESCRIBE ONE OF THE FOLLOWING IF OPIOID NAIVE:						If frail, consider lower starting dose of morphine e.g.1-2mg subcutaneously 1 hourly
Pain	Morphine sulfate	2.5mg-5mg	1 hourly	30mg	SC	10mg/mL (1mL)	If mild to moderate renal impairment, consider lower starting dose of morphine as above; if eGFR <30 mL/min/1.73 m², consider using oxycodone instead
	OR Oxycodone	1mg-2mg	1 hourly	12mg		10mg/mL (1mL)	
	PRESCRIBE ONE OF THE FOLLOWING IF ON REGULAR OPIOIDS:						To establish appropriate subcutaneous PRN opioid dose:
	Continue the opioid the patient is already taking	See notes	1 hourly	Equivalent of six PRN doses	SC	Strong enough to	- Calculate current total daily oral morphine/oxycodone dose
						enable maximum 2mL	- Divide this by six for oral PRN dose
						injection	- Divide the oral PRN dose by 2 for SC PRN dose
						Morphine: 10mg/mL, 15mg/mL or 30mg/mL Oxycodone: 10mg/mL or 50mg/mL	If on regular oxycodone in a syringe pump or regular oral oxycodone, prescribe immediate release oxycodone for PRN SC use
							If on fentanyl, see guidelines for appropriate SC PRN dose
							If prescribing a range of PRN doses, ensure the range is limited (e.g. adjacent PRN doses) and appropriate to the calculated PRN dose
	USUALLY PRESCRIBE ONE OF THE FOLLOWING (consider first and second line options if needed)						Lower doses of levomepromazine can avoid excess sedation.
Nausea/ Vomiting	Levomepromazine	2.5mg - 6.25mg	6 hourly	25mg	sc	25mg/mL (1mL)	Levomepromazine is a good broad-spectrum choice, BUT it is worth considering if a different antiemetic is more appropriate.
	See notes for alternatives						If on an effective oral anti-emetic, consider continuing that subcutaneously
Agitation	PRESCRIBE AT LEAST ONE OF THE FOLLOWING						■ If eGFR <30 mL/min/1.73 m², consider reducing midazolam dose
	Midazolam	2.5mg-5mg	1 hourly	30mg	SC	10mg/2mL (2mL)	e.g. 1mg – 2.5mg subcutaneously 1 hourly
	IF DELIRIUM IS PRESENT, CONSIDER ALSO PRESCRIBING ONE OF THE FOLLOWING						Consider prescribing midazolam AND a drug for delirium, if indicated
	Haloperidol	0.5-1.5mg	2 hourly	5mg	SC	5mg/mL (1mL)	Consider prescribing midazolam AND a drug for definium, il indicated
	Levomepromazine	6.25mg	2 hourly	25mg	SC	25mg/mL (1mL)	
	PRESCRIBE ONE OF THE FOLLOWING						Alternatives include:
Excess Respiratory Secretions	Glycopyrronium	200 micrograms	1 hourly	1200 micrograms	SC	200 micrograms/mL (1mL)	 hyoscine butylbromide 20mg subcutaneously PRN, max. 1 hourly, max. 240mg in 24hrs hyoscine hydrobromide 400micrograms subcutaneously PRN, max. 1 hourly, max. 2400micrograms in 24 hours (note, causes sedation)
	PRESCRIBE ONE OF THE FOLLOWING IF OPIOID NAÏVE (see notes if on regular opioids):						• If taking regular opioids, consider prescribing a lower dose of their regular PRN opioid
Breath- lessness	Morphine sulfate	2.5mg-5mg	4 hourly	30mg	SC	10mg/mL (1mL)	for breathlessness – seek Specialist Palliative Care advice Consider oxycodone if renal impairment (particularly if eGFR <30 mL/min/1.73 m²) If on regular oxycodone, prescribe oxycodone for PRN use
	OR Oxycodone	1mg-2mg	4 hourly	12mg		10mg/mL (1mL)	
	IF ASSOCIATED ANXIETY/FEAR, CONSIDER ALSO PRESCRIBING:						If breathlessness is significant, consider reducing maximum frequency of morphine
	Midazolam	2.5mg-5mg	2 hourly	30mg	SC	10mg/2mL (2mL)	and/or midazolam to 1 hourly

- See Lancashire and South Cumbria Clinical Practice Summary for further information via www.elmmb.nhs.uk/policies-and-guidelines/palliative-care/
- Either a set dose or a range of doses can be prescribed depending on the patient's circumstances a range is not mandatory
- Unless stated otherwise, medication being given for pain, breathlessness or agitation does not have a definite maximum dose, and so the "Max 24 hr dose to be given PRN" on an authorisation form applies only to PRN doses. Medication being given for nausea, vomiting or excess respiratory secretions does have a maximum dose, and so the "Max 24 hr dose to be given PRN" should include any of the same medication being given by syringe pump.
- Consider if any other symptoms are likely to occur e.g. seizures, terminal haemorrhage. If so, consider prescribing additional PRN drugs,
 e.g. for acute seizure midazolam 5mg-10mg, repeated after 10 minutes, maximum 20mg (2 doses) subcutaneously, intramuscularly or buccally.
- Ensure enough drugs are prescribed to meet the patient's anticipated needs; 5 to 10 ampoules minimum of each drug, but more if patient likely to need more or bank holiday
- If 2 or more PRN doses of a particular drug are needed in 24 hours, consider starting a syringe pump.
- If a syringe pump is or may be needed, ensure the diluent is prescribed, e.g. 10 x 10mL ampoules of water for injection