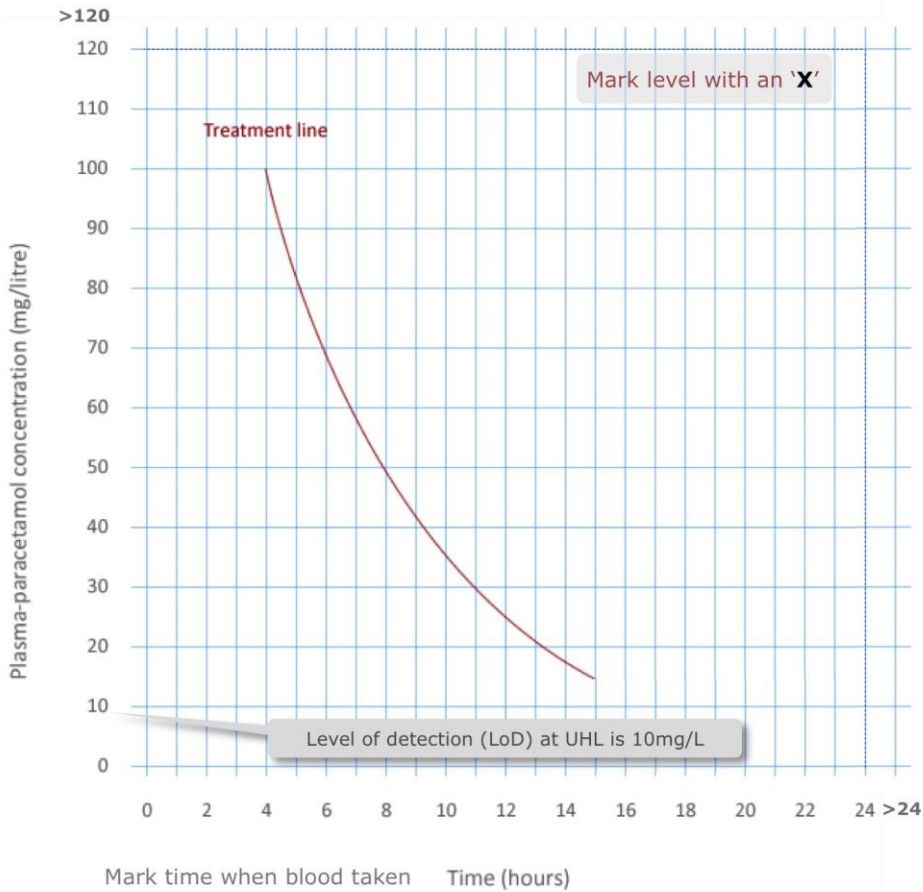




## ⑤ Paracetamol blood level



## ⑦ NAC regimen

- N-Acetylcysteine (NAC) ampoules contain 2G NAC in 10mL (200mg/mL)
- Regimen consists of 3 infusions given consecutively over 21h
- Tick applicable weight range (in pregnancy, here: **ACTUAL** weight)
- Prescribe NAC on fluid page of drug chart as per example in box 8

Patient weight (kg)	Infusion 1: add required amount of NAC to a 200mL bag of Glucose 5%			Infusion 2: add required amount of NAC to a 500mL bag of Glucose 5%			Infusion 3: add required amount of NAC to a 1000mL bag of Glucose 5%		
	NAC 150mg/kg		Rate	NAC 50mg/kg		Rate	NAC 100mg/kg		Rate
	Dose	Volume		Dose	Volume		Dose	Volume	
	mg	mL	mL/h	mg	mL	mL/h	mg	mL	mL/h
40-49	6800	34	234	2400	12	128	4600	23	64
50-59	8400	42	242	2800	14	129	5600	28	64
60-69	9800	49	249	3400	17	129	6600	33	65
70-79	11400	57	257	3800	19	130	7600	38	65
80-89	12800	64	264	4400	22	131	8600	43	65
90-99	14400	72	272	4800	24	131	9600	48	66
100-109	15800	79	279	5400	27	132	10600	53	66
>109	16600	83	283	5600	28	132	11000	55	66
Run time	1h			4h			16h		

## ⑧ NAC example prescription for 62kg patient as per table in box 7

Date	Infusion fluid		Additions to infusion		IV or SC	Line	Start Time	Time to run or ml/hr	Fluid Batch No.	Prescriber
	Type/strength	Volume	Drug	Dose						
DD/MM/YY	Glucose 5%	200mL	N-Acetylcysteine	9800mg = 49mL	IV		HH:MM	249mL/h (i.e. runs over 1h)		Dr.'s Name
DD/MM/YY	Glucose 5%	500mL	N-Acetylcysteine	3400mg = 17mL	IV		HH:MM	129mL/h (i.e. runs over 4h)		Dr.'s Name
DD/MM/YY	Glucose 5%	1000mL	N-Acetylcysteine	6600mg = 33mL	IV		HH:MM	65mL/h (i.e. runs over 16h)		Dr.'s Name

## ⑥ Blood results

	initially	post-NAC
<b>Time</b>		
liver unit referral criteria (NB: also include hepatic encephalopathy >grade II)		
<b>pH</b>		<7.3
<b>pCO<sub>2</sub></b>		
<b>Bicarb</b>		
<b>Lactate</b>		>3.5*
<b>Glucose</b>		
* >3 after fluid resuscitation/24h post-ingestion		
<b>Paracetamol</b>		
NB: Patients with paracetamol levels >700mg/L who are also in coma with a high lactate may require haemodialysis alongside NAC; d/w NPIS		
<b>Na</b>		
<b>K</b>		
<b>Urea</b>		
<b>Crea</b>		>300
<b>Bili</b>		
<b>ALT</b>		
<b>Alb</b>		
<b>AP</b>		
<b>WBC</b>		
<b>Hb</b>		
<b>Platelets</b>		
<b>INR</b>		
<b>Prothrombin time</b>		>20

## ⑨ NAC adverse reactions

NAC can cause nausea, vomiting, flushing, urticarial rash, angioedema, tachycardia, bronchospasm and, rarely, shock.

Reactions occur in around 30% of patients. They are more likely in women, asthmatics, those with a family history of allergies and patients with low Paracetamol levels. They are usually seen during infusion of the 1<sup>st</sup> bag (large amounts being given rapidly).

Reactions can often be controlled by simply stopping the infusion temporarily; consider giving Chlorphenamine 10mg IV if not. Add Salbutamol 5mg neb if bronchospasm.

If unsuccessful use anaphylaxis pathway.

NB: Once reaction settled, restart 1<sup>st</sup> bag at half the rate (i.e. over 2h rather than 1h) then give 2<sup>nd</sup> and 3<sup>rd</sup> bag at normal rate.

Previous reaction is **NO** contraindication to NAC. If patient reports previous reactions consider pretreatment with Chlorphenamine 10mg and Ranitidine 50mg IV, and give 1<sup>st</sup> bag over 2h. Pretreat with Salbutamol if previous bronchospasm.