

Dispensing and Administration Guidelines for CIN (Contrast Induced Nephropathy)

NAC (N-acetylcysteine) + Hydration

Oral NAC dosing	Hydration
Give NAC 600mg liquid (3ml of 20% solution) in 9ml ginger ale or cola	0.9% sodium chloride IVF at 1ml/kg/hr 12hrs pre and post catheterization (normal saline preferred, but 0.45% has also been used with success)

IV Sodium Bicarbonate (154 meq/L)

IV Sodium Bicarbonate 154 meq mixed in 1 liter of D5W			
	3ml/kg IV bolus over 1 hour	1ml/kg/hr x 6 hours IV infusion	Total ml infused
60 kg	180 ml	360 ml (60 ml/hr)	540 ml
70 kg	210 ml	420 ml (70 ml/hr)	630 ml
80 kg	240 ml	480 ml (80 ml/hr)	720 ml
90 kg	270 ml	540 ml (90 ml/hr)	810 ml
100 kg	300 ml	600 ml (100 ml/hr)	900 ml
≥ 110 kg	330 ml	660 ml (110 ml/hr)	990 ml

(JAMA 2004;291(19): 2328-34)

IV N-Acetylcysteine

IV N-Acetylcysteine dosing for CIN		
	150 mg/kg IV bolus over 30 minutes	50 mg/kg IV infusion over 4 hours
60 kg	9,000 mg / 500 ml NS	3,000 mg / 500 ml NS
70 kg	10,500 mg / 500 ml NS	3,500 mg / 500 ml NS
80 kg	12,000 mg / 500 ml NS	4,000 mg / 500 ml NS
90 kg	13,500 mg / 500 ml NS	4,500 mg / 500 ml NS
≥ 100 kg	15,000 mg / 500 ml NS	5,000 mg / 500 ml NS

(The RAPPID Study-J Amer Coll Card 2003;41(12): 2114-8)

UMMC Pharmacy Cost Comparisons with treatment regimens for CIN

Regimens	Cost
600mg NAC x 8 doses (oral)	\$ 5.82
2 liters NS	\$ 1.60
Sodium bicarbonate 154 meq/liter D5W	\$ 1.32 (drug only)
70kg patient- 10,500mg/500ml NS BOLUS IV NAC	\$ 183.00 (drug only)
70kg patient- 3,500mg/500ml NS infusion IV NAC	\$ 61.00 (drug only)

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IV N-Acetylcysteine

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Oral N-Acetylcysteine

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Meta-Analysis

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