

Heparin Nomogram Protocol



Heparin Nomogram

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STROKE** INITIAL DOSING

Heparin 25,000 units in 250 mL Diluent ONLY

Admission Weight (kilograms)	Initial Infusion (units/hr)	Initial Rate (mL/hour)
< 46	500	5
46 – 50	600	6
51 –55	650	6.5
56 – 60	700	7
61 – 65	750	7.5
66 – 70	900	9
71 – 75	900	9
76 – 80	1,000	10
81 – 85	1,000	10
86 – 90	1,100	11
91 – 95	1,200	12
>95	1,200	12

Heparin Nomogram

Stroke Treatment Titration

Heparin 25,000 units in 250 mL Diluent ONLY

Call Prescriber for aPTT 40 or less or 65 or greater

Weight Range (kg)	aPTT (seconds) Less than 40		aPTT (seconds) 40 - 53	aPTT (seconds) 54 -65		aPTT (seconds) Greater than 65		
	Increase Dose (units/hr)	Increase Rate (mL/hr)	Therapeutic	Decrease Dose (units/hr)	Decrease Rate (mL/hr)	STOP Infusion	Decrease Dose (units/hr)	Decrease Rate (mL/hr)
< 46	100	1	no change	-100	-1	1 hour	-100	-1
46 – 50	100	1	no change	-100	-1	1 hour	-100	-1
51 –55	100	1	no change	-100	-1	1 hour	-200	-2
56 – 60	100	1	no change	-100	-1	1 hour	-200	-2
61 – 65	100	1	no change	-100	-1	1 hour	-200	-2
66 – 70	100	1	no change	-100	-1	1 hour	-200	-2
71 – 75	100	1	no change	-100	-1	1 hour	-200	-2
76 – 80	200	2	no change	-200	-2	1 hour	-200	-2
81 – 85	200	2	no change	-200	-2	1 hour	-200	-2
86 – 90	200	2	no change	-200	-2	1 hour	-300	-3
91 – 95	200	2	no change	-200	-2	1 hour	-300	-3
96 –100	200	2	no change	-200	-2	1 hour	-300	-3
101-110	200	2	no change	-200	-2	1 hour	-300	-3
111–120	200	2	no change	-200	-2	1 hour	-300	-3
121–130	300	3	no change	-300	-3	1 hour	-400	-4

ACS TREATMENT** INITIAL DOSING

Heparin 25,000 units in 250 mL Diluent ONLY

Admission Weight (kilograms)	Initial Bolus (units)	Initial Infusion (units/hr)	Initial Rate (mL/hour)
< 46	2,700	500	5
46 – 50	2,900	600	6
51 – 55	3,200	650	6.5
56 – 60	3,500	700	7
61 – 65	3,800	750	7.5
66 – 70	4,100	800	8
71 – 75	4,400	900	9
76 – 80	4,700	950	9.5
81 or greater	5,000	1,000	10

*For STEMI2 patients or patients on GP IIb/IIIa RAs):
 Max Bolus = 4,000 units, max initial infusion = 1,000 units/hr (10 mL/hr)
 For patients treated specifically with tenecteplase (TNKase®)3: if pt weighs >
 67 kg: bolus = 4,000 units, then initial infusion = 800 units/hr
 (8 mL/hr)*

****Formerly known as "LOW DOSE" Nomogram**

Heparin Nomogram

ACS Treatment Titration

Heparin 25,000 units in 250 mL Diluent ONLY
 Call Prescriber for aPTT 40 or less or 93 or greater

Weight Range (kg)	aPTT (seconds) Less than 40			aPTT (seconds) 40-52		aPTT (seconds) 53-73	aPTT (seconds) 74-83		aPTT (seconds) 84-93			aPTT (seconds) Greater than 93		
	Give Bolus (units)	Increase Dose (units/hr)	Increase Rate (mL/hr)	Increase Dose (units/hr)	Increase Rate (mL/hr)	Therapeutic	Decrease Dose (units/hr)	Decrease Rate (mL/hr)	STOP Infusion	Decrease Dose (units/hr)	Decrease Rate (mL/hr)	STOP Infusion	Decrease Dose (units/hr)	Decrease Rate (mL/hr)
< 46	2,700	150	1.5	100	1	no change	50	-0.5	30 min	-100	-1	1 hour	-150	-1.5
46-50	2,900	150	1.5	100	1	no change	50	-0.5	30 min	-100	-1	1 hour	-150	-1.5
51-55	3,200	150	1.5	100	1	no change	50	-0.5	30 min	-100	-1	1 hour	-150	-1.5
56-60	3,500	200	2	100	1	no change	50	-0.5	30 min	-100	-1	1 hour	-200	-2
61-65	3,800	200	2	100	1	no change	50	-0.5	30 min	-100	-1	1 hour	-200	-2
66-70	4,100	200	2	150	1.5	no change	50	-0.5	30 min	-150	-1.5	1 hour	-200	-2
71-75	4,400	200	2	150	1.5	no change	100	-1	30 min	-150	-1.5	1 hour	-200	-2
76-80	4,700	250	2.5	150	1.5	no change	100	-1	30 min	-150	-1.5	1 hour	-250	-2.5
81-85	5,000	250	2.5	150	1.5	no change	100	-1	30 min	-150	-1.5	1 hour	-250	-2.5
86-90	5,300	250	2.5	200	2	no change	100	-1	30 min	-200	-2	1 hour	-250	-2.5
91-95	5,600	300	3	200	2	no change	100	-1	30 min	-200	-2	1 hour	-300	-3
>95	6,000	300	3	200	2	no change	100	-1	30 min	-200	-2	1 hour	-300	-3

Heparin Nomogram

Full Anticoagulation TITRATION DOSING**

Heparin 25,000 units in 250 mL Diluent ONLY
 Call Prescriber for aPTT 40 or less or 128 or greater

Weight Range (kg)	aPTT (seconds) Less than 40			aPTT (seconds) 40-57			aPTT (seconds) 58-99	aPTT (seconds) 100-128		aPTT (seconds) Greater than 128		
	Give Bolus (units)	Increase Dose (units/hr)	Increase Rate (mL/hr)	Give Bolus (units)	Increase Dose (units/hr)	Increase Rate (mL/hr)	Therapeutic	Decrease Dose (units/hr)	Decrease Rate (mL/hr)	STOP Infusion	Decrease Dose (units/hr)	Decrease Rate (mL/hr)
< 40	3,000	200	2	1,500	100	1	no change	-100	-1	1 hour	-100	-1
40-45	3,500	200	2	1,500	100	1	no change	-100	-1	1 hour	-100	-1
46-50	4,000	200	2	2,000	100	1	no change	-100	-1	1 hour	-100	-1
51-55	4,000	200	2	2,000	100	1	no change	-100	-1	1 hour	-200	-2
56-60	4500	200	2	2,000	100	1	no change	-100	-1	1 hour	-200	-2
61-65	5,000	300	3	2,500	100	1	no change	-100	-1	1 hour	-200	-2
66-70	5,500	300	3	2,500	100	1	no change	-100	-1	1 hour	-200	-2
71-75	6,000	300	3	3,000	200	2	no change	-200	-2	1 hour	-200	-2
76-80	6,500	300	3	3,000	200	2	no change	-200	-2	1 hour	-300	-3
81-85	6,500	400	4	3,000	200	2	no change	-200	-2	1 hour	-300	-3
86-90	7,000	400	4	3,500	200	2	no change	-200	-2	1 hour	-300	-3
91-95	7,500	400	4	3,500	200	2	no change	-200	-2	1 hour	-300	-3
96-100	8,000	400	4	4,000	200	2	no change	-200	-2	1 hour	-300	-3
101-105	8,500	400	4	4,000	200	2	no change	-200	-2	1 hour	-300	-3
106-110	9,000	500	5	4,000	200	2	no change	-200	-2	1 hour	-300	-3
111-115	9,000	500	5	4,500	200	2	no change	-200	-2	1 hour	-400	-4
116-120	9,500	500	5	4,500	300	3	no change	-300	-3	1 hour	-400	-4
121-125	10,000	500	5	5,000	300	3	no change	-300	-3	1 hour	-400	-4
126-130	10,000	500	5	5,000	300	3	no change	-300	-3	1 hour	-400	-4
> 130	10,000	500	5	5,000	300	3	no change	-300	-3	1 hour	-400	-4

Heparin Nomogram

Full Anticoagulation** INITIAL DOSING

Heparin 25,000 units in 250 mL Diluent ONLY

Admission Weight (kilograms)	Initial Bolus (units)	Initial Infusion (units/hr)	Initial Rate (mL/hour)
< 40	3,000	700	7
40-45	3,500	800	8
46-50	4,000	900	9
51-55	4,000	1,000	10
56-60	4,500	1,100	11
61-65	5,000	1,100	11
66-70	5,500	1,200	12
71-75	6,000	1,300	13
76-80	6,500	1,400	14
81-85	6,500	1,500	15
86-90	7,000	1,600	16
91-95	7,500	1,700	17
96-100	8,000	1,800	18
101-105	8,500	1,800	18
106-110	9,000	1,900	19
111-115	9,000	2,000	20
116-120	9,500	2,100	21
121-125	10,000	2,200	22
126-130	10,000	2,300	23
>130	10,000	2,400	24

**** Formerly known as "HIGH DOSE" Nomogram**

Nomogram for POST-CV SURGERY IV HEPARIN

aPTT target: 58 - 99sec [AntiXa target: 0.3 - 0.7]

25,000 units in 250 ml = 100 units/mL

INITIAL INFUSION 10 units/kg/h

Pt weight Kg	INITIAL INFUSION units/hr	INITIAL INFUSION ml/hr
< 40	400	4
40-45	430	4.3
46-50	480	4.8
51-55	530	5.3
56-60	580	5.8
61-65	630	6.3
66-70	680	6.8
71-75	730	7.3
76-80	780	7.8
81-85	830	8.3
86-90	880	8.8
91-95	930	9.3
96-100	980	9.8
> 100	1,000	10

	<i>aPTT</i> <40 sec [AntiXa < 0.1]		<i>aPTT</i> 40 - 57 sec [AntiXa 0.1-0.29]		<i>aPTT</i> 58 - 99 sec [AntiXa 0.3-0.7]		<i>aPTT</i> 100 – 128 sec [AntiXa 0.71-0.99]		<i>aPTT</i> > 128 sec [AntiXa > 0.99] <i>stop infusion for 60 min, then:</i>	
Pt weight Kg	Increase by: 2 units/kg/hr		Increase by: 1 units/kg/hr		THERAPEUTIC RANGE	Decrease by: 2 units/kg/hr		Decrease by: 3 units/kg/hr		
	Units/hr	ml/hr	Units/hr	ml/hr		Units/hr	ml/hr	Units/hr	ml/hr	
< 40	100	1	50	0.5	N O C H A N G E	100	1	100	1	
40-45	100	1	50	0.5		100	1	100	1	
46-50	100	1	50	0.5		100	1	100	1	
51-55	100	1	50	0.5		100	1	200	2	
56-60	100	1	50	0.5		100	1	200	2	
61-65	150	1.5	50	0.5		100	1	200	2	
66-70	150	1.5	50	0.5		100	1	200	2	
71-75	150	1.5	100	1		200	2	200	2	
76-80	150	1.5	100	1		200	2	300	3	
81-85	200	2	100	1		200	2	300	3	
86-90	200	2	100	1		200	2	300	3	
91-95	200	2	100	1		200	2	300	3	
96-100	200	2	100	1		200	2	300	3	
>100	200	2	100	1		200	2	300	3	