

# Alteplase (rt-PA-Activase®) dosage administration

## Acute Ischemic Stroke Intravenous Thrombolysis Chart

### FULL DOSE: 0.9 mg/kg

Administer 10% as a bolus over one minute and the remaining 90% over 60 minutes by continuous infusion.

### Alteplase concentration = 1 mg/mL

(Calculations rounded to the nearest tenth)

Pt weight (kg)	Pt weight (lbs)	Total dose (mL)	Discard Quantity	Bolus dose (mL)	Infusion dose (mL)
41.0	90	36.9	63.2	3.7	33.2
41.8	92	37.6	62.4	3.8	33.8
42.7	94	38.4	61.6	3.8	34.6
43.6	96	39.2	60.8	3.9	35.3
44.6	98	40.1	59.9	4	36.1
45.5	100	41	59	4.1	36.9
46.4	102	41.8	58.2	4.2	37.6
47.3	104	42.6	57.4	4.3	38.3
48.2	106	43.4	56.6	4.3	39.1
49.1	108	44.2	55.8	4.4	39.8
50.0	110	45	55	4.5	40.5
50.9	112	45.8	54.2	4.6	41.2
51.8	114	46.6	53.4	4.7	41.9
52.7	116	47.4	52.6	4.7	42.7
53.6	118	48.2	51.8	4.8	43.4
54.6	120	49.1	50.9	4.9	44.2
55.5	122	50	50	5	45
56.4	124	50.8	49.2	5.1	45.7
57.3	126	51.6	48.4	5.2	46.4
58.2	128	52.4	47.6	5.2	47.2
59.1	130	53.2	46.8	5.3	47.9
60.0	132	54	46	5.4	48.6
60.9	134	54.8	45.2	5.5	49.3
61.8	136	55.6	44.4	5.6	50
62.7	138	56.4	43.6	5.6	50.8
63.6	140	57.2	42.8	5.7	51.5
64.6	142	58.1	41.9	5.8	52.3
65.5	144	59	41	5.9	53.1
66.4	146	59.8	40.2	6	53.8
67.3	148	60.6	39.4	6.1	54.5
68.2	150	61.4	38.6	6.1	55.3
69.1	152	62.2	37.8	6.2	56
70	154	63	37	6.3	56.7
70.9	156	63.8	36.2	6.4	57.4
71.8	158	64.6	35.4	6.5	58.1
72.7	160	65.4	34.6	6.5	58.9
73.6	162	66.2	33.8	6.6	59.6
74.6	164	67.1	32.9	6.7	60.4
75.5	166	68	32	6.8	61.2
76.4	168	68.8	31.2	6.9	61.9
77.3	170	69.6	30.4	7	62.6

Pt weight (kg)	Pt weight (lbs)	Total dose (mL)	Discard Quantity	Bolus dose (mL)	Infusion dose (mL)
78.2	172	70.4	29.6	7	63.4
79.1	174	71.2	28.8	7.1	64.1
80.0	176	72	28	7.2	64.8
80.9	178	72.8	27.2	7.3	65.5
81.8	180	73.6	26.4	7.4	66.2
82.7	182	74.4	25.6	7.4	67
83.6	184	75.2	24.8	7.5	67.7
84.6	186	76.1	23.9	7.6	68.5
85.5	188	77	23	7.7	69.3
86.4	190	77.8	22.2	7.8	70
87.3	192	78.6	21.4	7.9	70.7
88.2	194	79.4	20.6	7.9	71.5
89.1	196	80.2	19.8	8	72.2
90.0	198	81	19	8.1	72.9
90.9	200	81.8	18.2	8.2	73.6
91.8	202	82.6	17.4	8.3	74.3
92.7	204	83.4	16.6	8.3	75.1
93.6	206	84.2	15.8	8.4	75.8
94.6	208	85.1	14.9	8.5	76.6
95.5	210	86	14	8.6	77.4
96.4	212	86.8	13.2	8.7	78.1
97.3	214	87.6	12.4	8.8	78.8
98.2	216	88.4	11.6	8.8	79.6
99.1	218	89.2	10.8	8.9	80.3
≥ 100.0	≥ 220	90	10	9	81

Patient weight: \_\_\_\_\_ kg (Maximum total dose is 90 mg)

- Remove excess drug from vial and waste.
- Bolus dose:** \_\_\_\_\_ mL (Maximum 9 mg/9 mL)  
Remove bolus and administer as IV push over 1 minute.
- Infusion dose:** \_\_\_\_\_ mL (Maximum 81 mg/81 mL)  
Administer infusion over 60 minutes. Near completion, a 50 mL 0.9% NS bag should replace empty tPA vial to ensure total dose is infused over 60 minutes.

(continued on back)

# Alteplase (rt-PA-Activase®) Reconstitution

**THE TOTAL DOSE FOR TREATMENT OF ACUTE ISCHEMIC STROKE SHOULD NOT EXCEED 90 mg. (NOTE: Vial contains 100 mg/100 mL)**

The recommended total dose is 0.9 mg/kg (not to exceed 90 mg total dose) infused over 60 minutes with 10% {(0.09 mg/kg (*max 9 mg*))} of the total dose administered as an initial intravenous bolus over 1 minute.

Reconstitution should be carried out using the transfer device provided, adding the contents of the accompanying 100 mL vial of Sterile Water, to the contents of the 100 mg vial of alteplase powder. Slight foaming upon reconstitution is not unusual; standing undisturbed for several minutes is usually sufficient to allow dissipation of any large bubbles. **100 mg VIALS DO NOT CONTAIN VACUUM.**

1. Use aseptic technique throughout.
2. Remove the protective flip-caps from the vial of alteplase and Sterile Water (SW).
3. Open the package containing the transfer device.
4. Remove the protective cap from one end of the transfer device and keeping the vial of SW upright, **insert the piercing pin vertically into the center of the stopper of the vial of SW first.**
5. Remove the protective cap from the other end of the transfer device. **DO NOT INVERT THE VIAL OF SW.**
6. Holding the vial of alteplase upside-down, position it so that the center of the stopper is directly over the exposed piercing pin of the transfer device.
7. Push the vial of alteplase down so that the piercing pin is inserted through the center of the alteplase vial stopper.
8. Invert the two vials so that the vial of alteplase is on the bottom (upright) and the vial of SW is upside-down, allowing the SW to flow down through the transfer device (approximately 0.5 mL of SW will remain in the diluent vial). Approximately 2 minutes are required for this procedure.
9. Remove the transfer device and the empty SW vial from the alteplase vial.
10. Swirl gently to dissolve the alteplase powder. **DO NOT SHAKE.**
11. **After reconstitution:**
  - a) **Remove the excess dose (100 mg – Total Dose = Excess) and waste the drug.**
  - b) **Remove the bolus dose from the vial using a 10 mL syringe and administer the IV bolus over 1 minute.**
  - c) **Hang vial upside down (plastic hook is on bottom of vial) and administer Infusion Dose over 60 minutes (Example: alteplase 60 mg/60 mL = 60 ml/hour).**

\*Near the end of the infusion a 50 mL bag of normal saline should be connected to the tubing infusing the alteplase to ensure the residual medication in the tubing is infused accordingly in the 60 minute period.

**No other medication should be added to infusion solutions containing Alteplase. (It is only compatible with normal saline.)**