

# Question 7

You are a doctor at General Hospital.

Bleep number: 3141

GMC number: 112 358 131

## Patient details

Patient name: Matthew Smith

Date of birth: 14/3/1954

Patient number: 883 014 012

## History

Matthew Smith presents to Emergency Department via ambulance with slurred speech, left sided facial droop, and weakness in his right arm and leg.

## Investigations

He has had a CT head which detected no abnormalities.

## Task

A senior neurologist has reviewed the patient and instructed you to prescribe the appropriate thrombolytic treatment.

Date	Type of Chart	Details	Signature NAME



## Drug Infusion Chart

**Affix patient label or complete details below**

**Patient number: 883 014 012**

**Surname: Smith**

Forename: Matthew

Date of birth: 14/3/1954

Address: 12 Lunar Crescent, NE1 3DR

Once only infusions

[illegible]

## Acute ischaemic stroke (under specialist neurology physician only)

By intravenous infusion

### Adult 18–79 years

Initially 900 micrograms/kg (max. per dose 90 mg), treatment **must** begin within 4.5 hours of symptom onset, to be given over 60 minutes, the initial 10% of dose is to be administered by intravenous injection and the remainder by intravenous infusion.

## Directions for administration

For *intravenous infusion* (Actilyse®), manufacturer advises give intermittently in Sodium chloride 0.9%; dissolve in water for injections to a concentration of 1 mg/mL or 2 mg/mL and infuse intravenously; alternatively dilute the solution further in the infusion fluid to a concentration of not less than 200 micrograms/mL; not to be infused in glucose solution.

### Calculations for our Patient

$900\text{mcg} \times 80\text{ kg} = 72,000\text{ mcg} / 72\text{mg total dose.}$

- 10% of total dose 7.2mg for IV injection.
- Round to 7mg.
- According to directions for administration dissolve in either 7 or 14 ml of sodium chloride 0.9%.
  - Could dilute up to 35ml but no indication to do so.
- 90% of total dose 64.8mg for IV infusion over 60 minutes.
- Round to 65mg.
- According to directions for administration dissolve in either 65 or 130 ml of sodium chloride 0.9%.
  - Could dilute in up to 325 ml but no indication to do so.
- Rate calculated by (volume of your solution)/ 1 hr