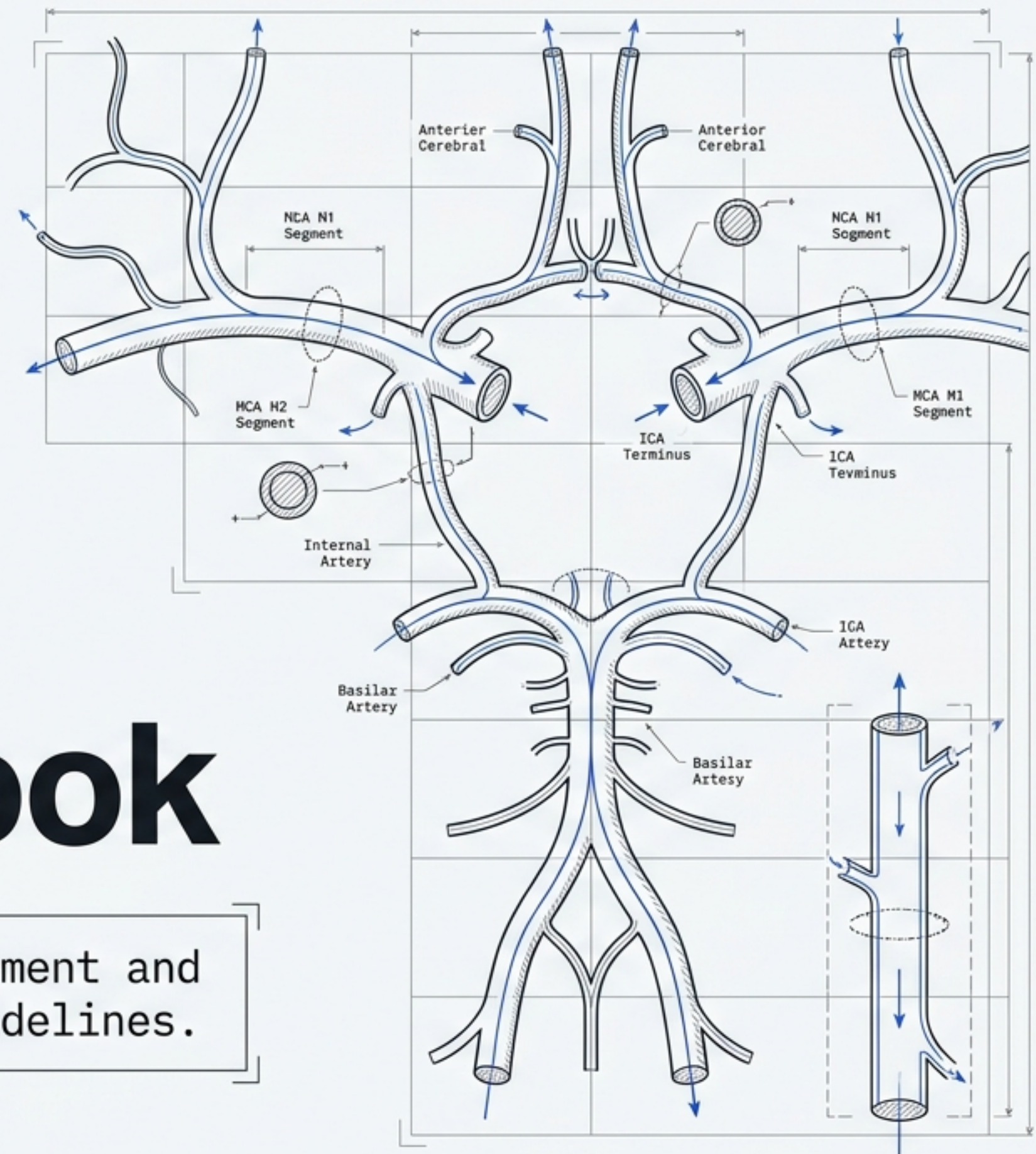


# Stroke & TIA: The 2026 Clinical Playbook

A rapid-reference protocol for acute management and secondary prevention. Based on Med2Date Guidelines.



## THE BURDEN

**27,000** new strokes annually in Australia (1 every 19 minutes).

**\$6.2 billion** system cost.



## THE BENCHMARK

Door-to-Needle Time:


 **≤60** minutes.

**00:01**

**1.9 Million Neurons Lost Per Minute of Large Vessel Occlusion.**

## THE PATIENT

Median age of first stroke:

 **73** (Male) / **78** (Female).

**25%** occur under age 65.

## THE MANDATE

Prehospital notification

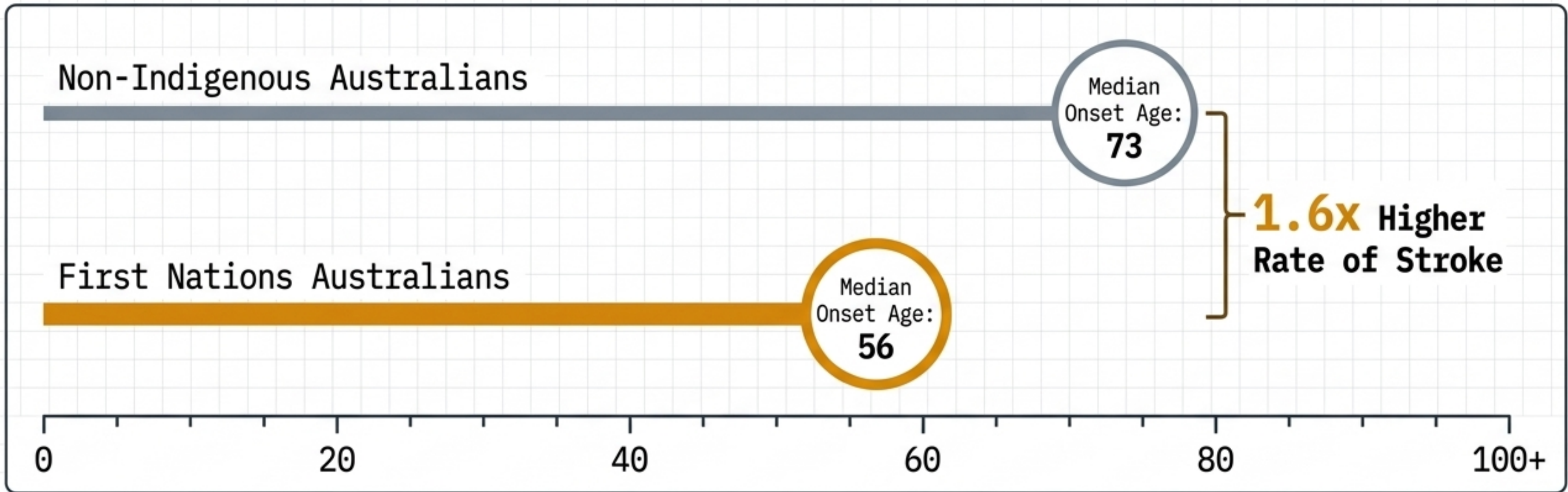


+ rapid transport





+ stroke unit care.






**REMOTE ACCESS**

<50% of remote stroke patients reach hospital within 4.5h. Telestroke networks are critical.


**CULTURAL SAFETY**

Mandates inclusion of Aboriginal Health Workers; emphasizes understanding of presence and Sorry Business.



**PBS CLOSE THE GAP (CTG)**

Reduces co-payments to ensure access to secondary prevention (statins, antihypertensives).



# TIA: The 48-Hour Warning.



**The Danger Zone:**  
50% of subsequent strokes occur within the first 48 hours.

**The Threat:**  
10–15% risk of completed stroke within 90 days.

**EXPRESS Study Data:** Same-day or next-day evaluation reduces subsequent stroke risk by up to 80%.

# The ABCD<sup>2</sup> Risk Speedometer



Score 0-3  
~1% 2-day stroke risk

Urgent TIA Clinic  
within 7 days



Score 4-5  
~4% 2-day stroke risk

Same-day/Next-day Specialist  
Assessment + Imaging



Score 6-7  
~8% 2-day stroke risk

Immediate ED Assessment  
+ Consider Admission

**Override Warning:** Do not use ABCD<sup>2</sup> to exclude evaluation. AF, carotid stenosis, or crescendo TIAs demand urgent escalation regardless of score.

# The Urgent Workup Checklist

## Essential - Immediate



**Non-contrast CT Brain:** Must occur <24h. Excludes **haemorrhage**, mass, **established infarct**.



**Antiplatelet Load:** Do not delay once bleeding excluded.  
Aspirin 300mg PO stat OR  
Clopidogrel 300mg PO stat.



**12-Lead ECG:** Screen for **atrial fibrillation**.

## Advanced - Available/Targeted



**MRI Brain with DWI:** Superior sensitivity. Reclassifies 30-50% of **TIA**s as minor strokes.



**CTA Head & Neck / Carotid Duplex:** Identify **large-vessel stenosis** urgently for **anterior circulation symptoms**.



**Extended Cardiac Monitoring:** Telemetry  $\geq 24$ h or Holter (7-14 days) for **cryptogenic cases**.

# Carotid Intervention Triggers



## ≥70% Stenosis.

CEA recommended within 2 weeks (NNT ≈ 5 over 5 years).  
Must be performed by surgeon with <6% complication rate.



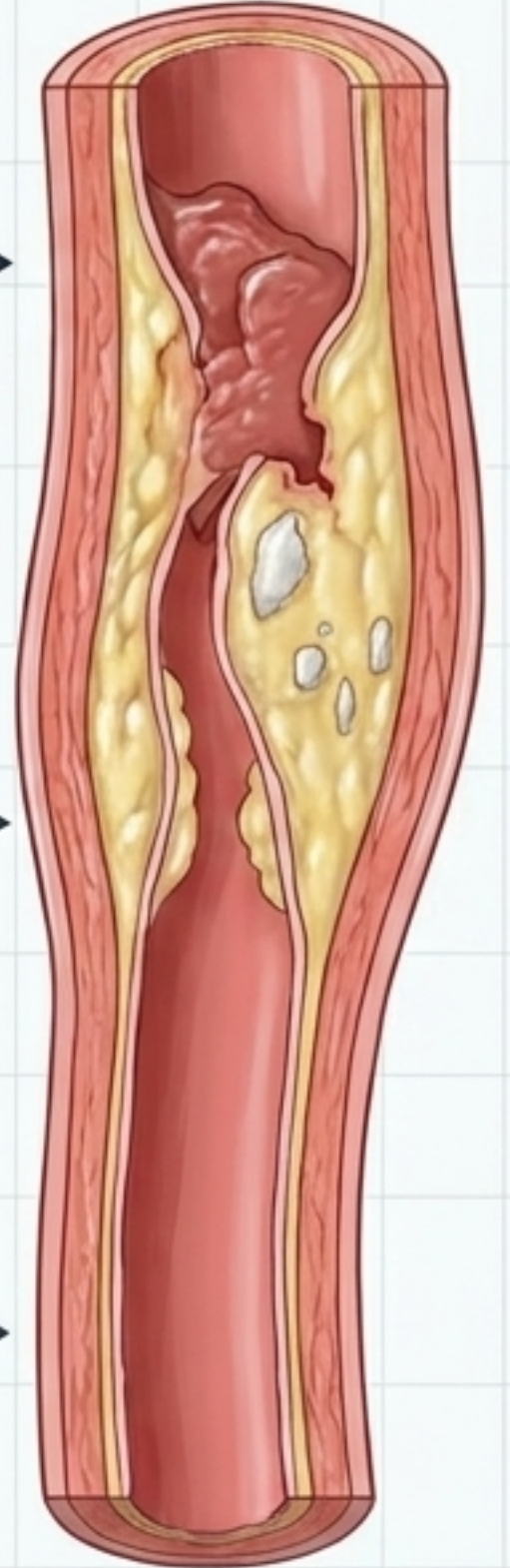
## 50–69% Stenosis.

Moderate benefit from Carotid Endarterectomy (CEA).  
Individualize decision (favour men, recent symptoms).



## <50% Stenosis.

Best medical therapy alone.  
Surgery not indicated.



# The Prehospital Funnel (FAST to CT)

## Public Recognition



## Pre-Notification



Ambulance  
'Code Stroke'  
activation.

## The Bypass



## CT Scanner



**CT Scanner**  
Imaging Initiated

**CT Standby + Stroke Team Ready =  
Drastic reduction in Door-to-Needle time.**

# 'Thrombolysis Protocol'

IV Alteplase (0.9 mg/kg max 90mg) OR Tenecteplase (0.25 mg/kg max 25mg).

## GO

≤4.5 hours from symptom onset/last known well

Measurable deficit

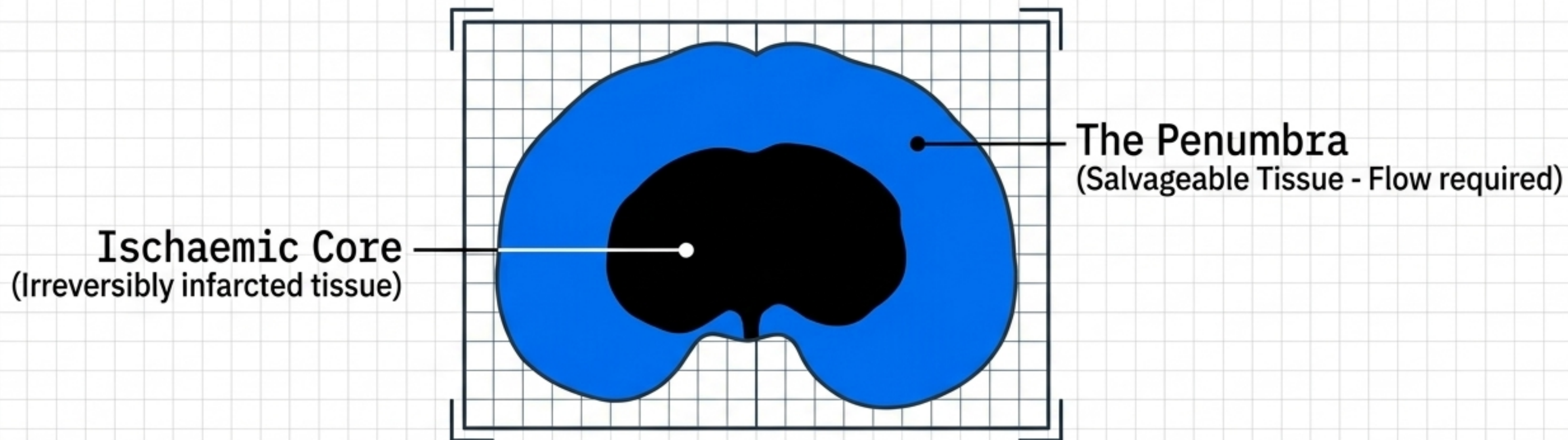
CT shows no blood

Age ≥18

## ABORT (Absolute Exclusions)

- ✓ ICH on CT
- ✓ BP stubbornly >185/110 mmHg
- ✓ Platelets <100 × 10<sup>9</sup>/L
- ⚠ DOAC use <48 hours (normal renal function)
- ✓ INR >1.7
- ⚠ Recent major surgery/trauma (<14 days)

# Endovascular Thrombectomy (EVT) Windows



0-6 Hours (Standard)



Standard CTA/MRA showing occlusion (ASPECTS  $\geq 6$ ). EVT indicated.

6-24 Hours (Extended)



Requires CTP/MRI mismatch (DAWN/DEFUSE 3 criteria). Core must be  $< 70$  mL with mismatch ratio  $\geq 1.8$ .

# COMPARISON MATRIX: Acute BP Management (Ischaemic Stroke)

	Pre-Thrombolysis	Post-Thrombolysis (First 24h)	Non-Thrombolysed Ischaemic
Target	<185/110 mmHg	<180/105 mmHg	Permissive Hypertension up to 220/120 mmHg
Rationale	To safely administer Alteplase.	Prevent haemorrhagic transformation.	Maintain collateral perfusion to the penumbra.
Agents	IV Labetalol 10-20mg boluses OR IV GTN infusion.	IV Labetalol or IV GTN infusion.	Treat only if >220/120 or end-organ damage.

# Intracerebral Haemorrhage: The Bleed (30–50% 30-day mortality).

## Assessment Sequence

### Airway

GCS  $\leq 8$  typically requires intubation.

### Imaging

Urgent non-contrast CT. Look for the 'Spot Sign' on CTA (active contrast extravasation = high expansion risk).

### ICH Score

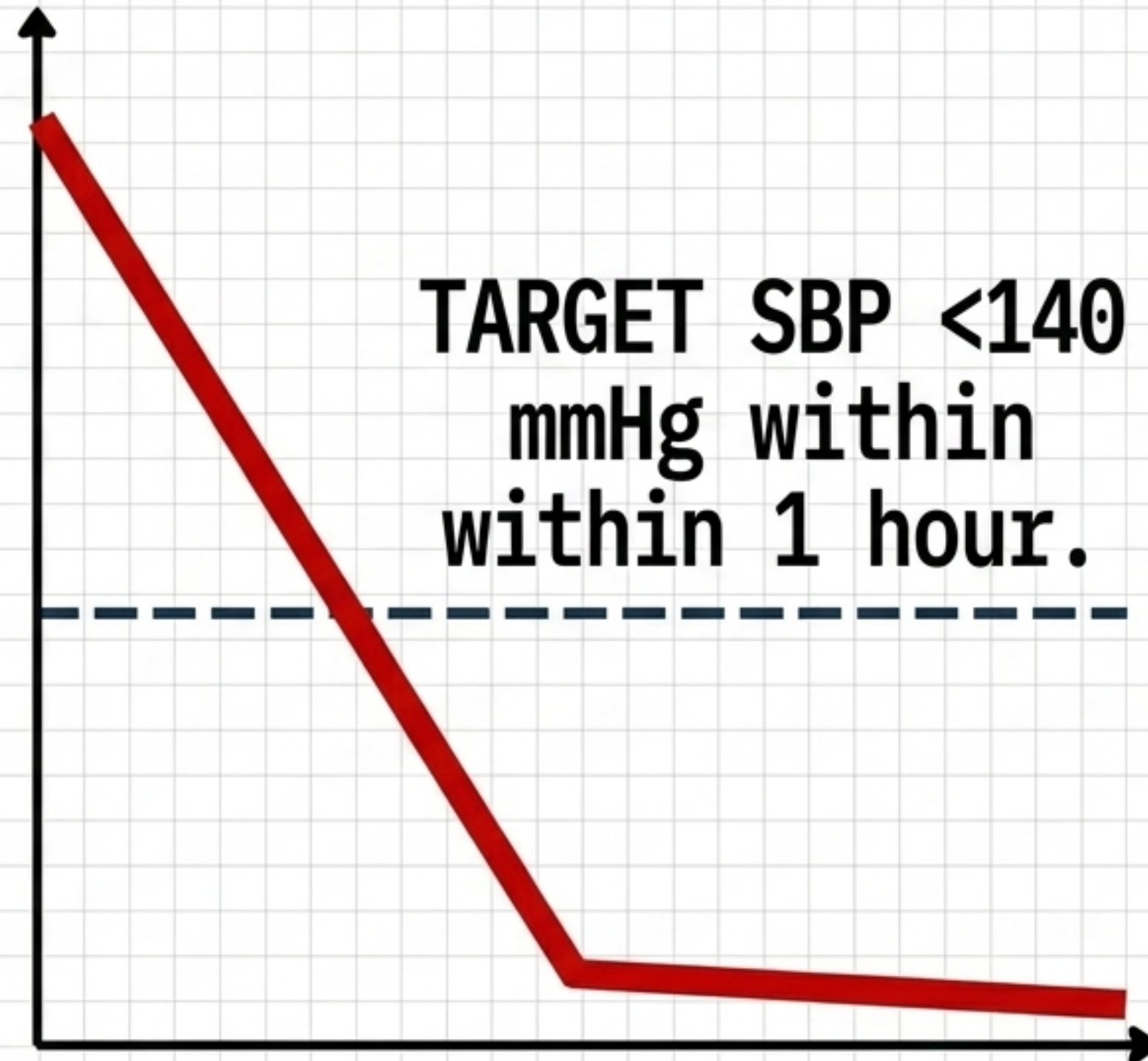
Prognostication based on GCS, Age, ICH Volume (ABC/2), Intraventricular Extension, Infratentorial Origin. (Score  $\geq 5$  = >95% mortality).

# The BP Crush (INTERACT2 Paradigm)

## The Evidence Data Card

INTERACT2 /  
ATACH-2 trials.

Early intensive  
lowering reduces  
haematoma  
expansion and  
improves  
functional  
outcomes.



## The Arsenal (Medication Panel)

- IV Labetalol  
(10-20mg boluses,  
max 300mg)
- IV Nicardipine  
(5mg/hr)
- IV GTN infusion

Transition to oral  
agents once stable.

# COMPARISON MATRIX: Anticoagulation Reversal

## The Lock (Offending Drug)

## The Key (Antidote & Dosage)

Warfarin



Vitamin K (5-10mg IV) + 4-Factor PCC (25-50 IU/kg based on INR).

Dabigatran (Pradaxa)



Idarucizumab (Praxbind) 5g IV.

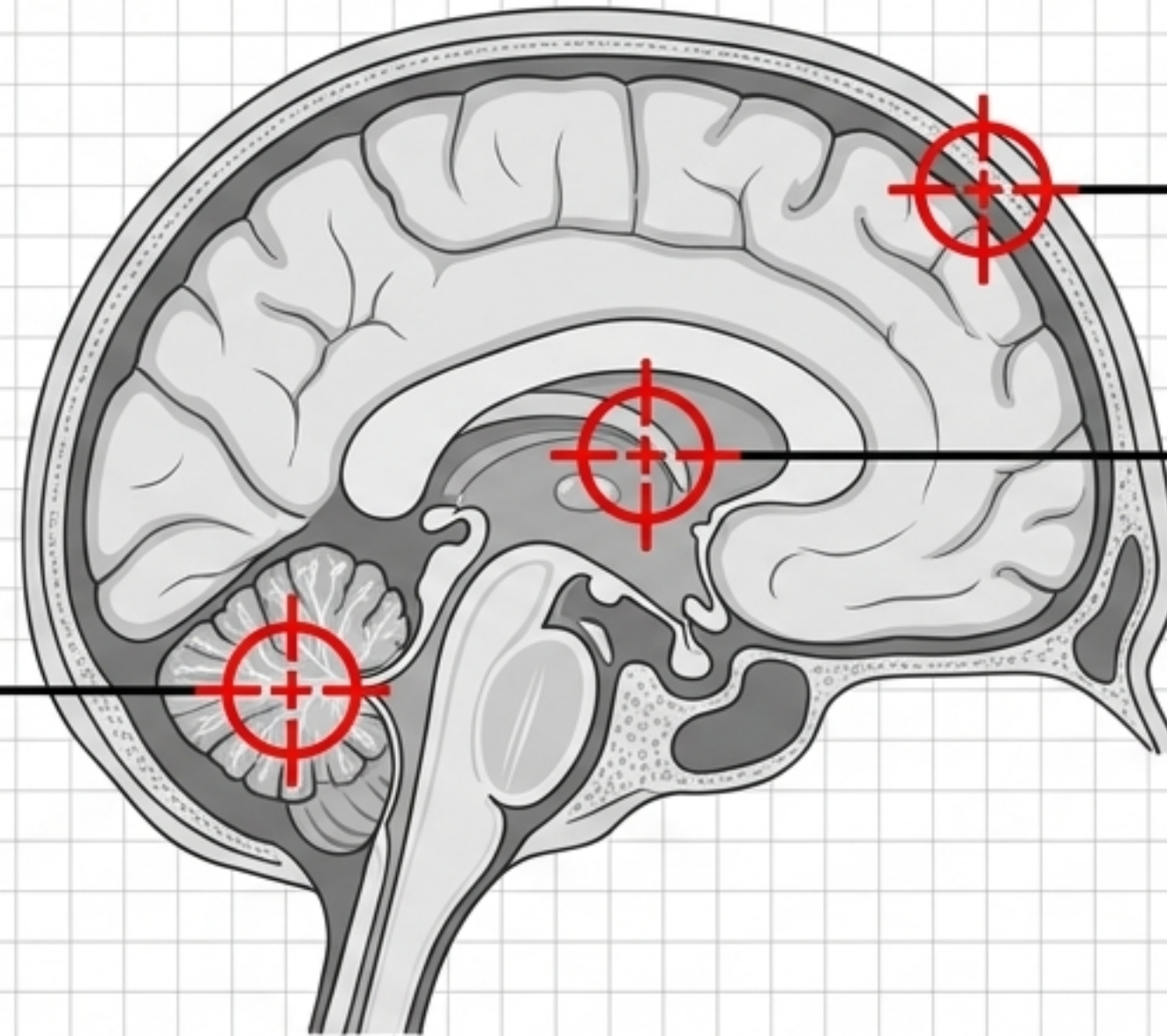
Apixaban / Rivaroxaban



Andexanet Alfa (Ondexxa)  
Low/High dose IV OR 4-Factor PCC  
50 IU/kg (if Andexanet unavailable).

**ALERT: Haematoma expansion risk is highest in the first hours.  
Reversal must not be delayed for any reason.**

# Neurosurgical Triggers



## Posterior Fossa/Cerebellum

Haemorrhage  $\geq 3\text{cm}$  or brainstem compression.  
**Action:** Urgent surgical evacuation (lifesaving).

## Superficial Lobar

$\leq 1\text{cm}$  from cortical surface with progressive deterioration (STICH II trial data).  
**Action:** Consider evacuation.

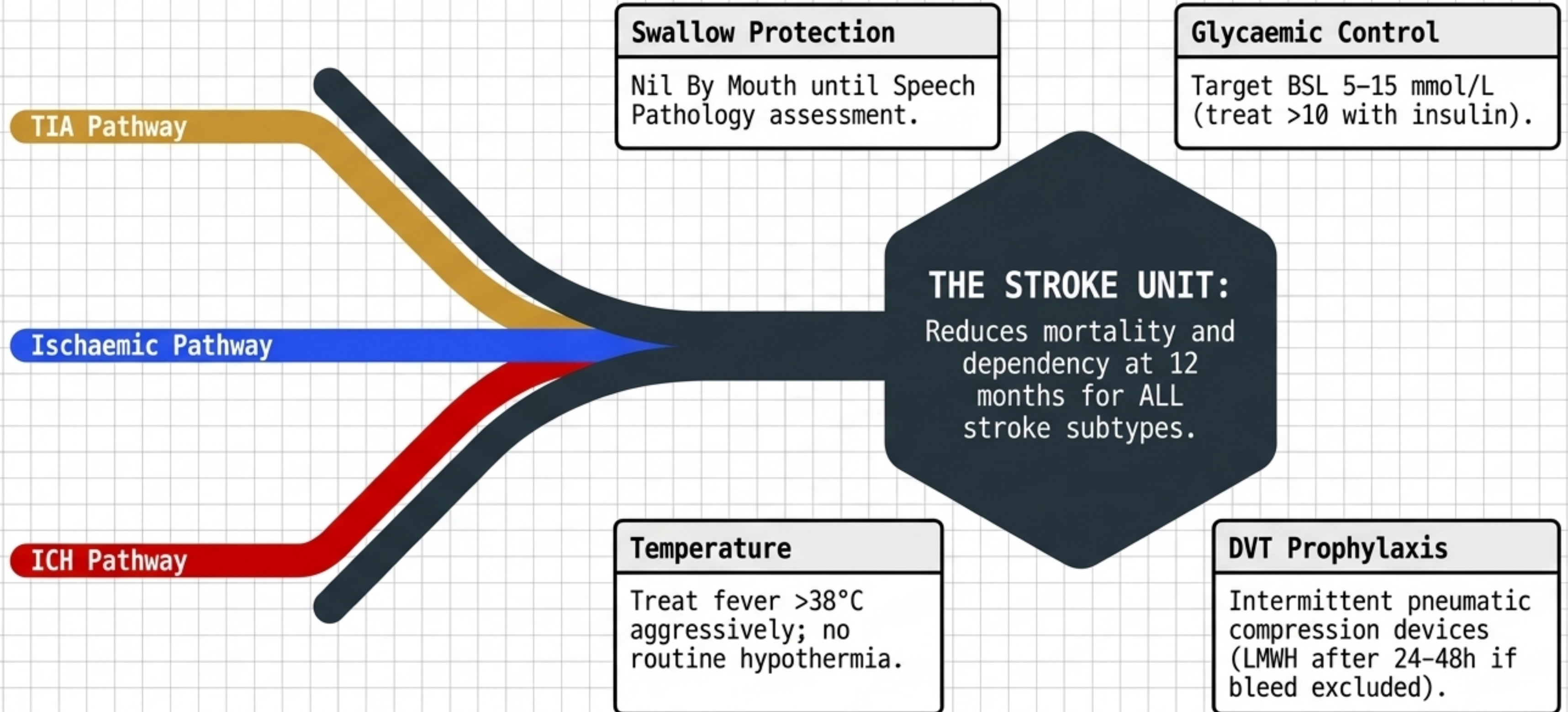
## Ventricles

Intraventricular haemorrhage causing Hydrocephalus.  
**Action:** External Ventricular Drain (EVD) insertion.

## Context Note

Deep-seated (basal ganglia/thalamic) ICH generally does not benefit from surgery (STICH I).

# SYNTHESIS ARC: The Stroke Unit Ecosystem



# Antiplatelet vs. Anticoagulant Decision Tree

Is the aetiology Cardioembolic?

NO - Non-Cardioembolic / Atherosclerotic

YES - Cardioembolic / AF

**Standard:** Aspirin 100mg OR  
Clopidogrel 75mg daily.

**Minor Stroke/High-Risk TIA:**  
Dual Antiplatelet Therapy (DAPT)  
for exactly 21 days (CHANCE/POINT  
trials), then monotherapy.  
DO NOT use DAPT long-term.

**Agent:** DOAC preferred (Apixaban,  
Rivaroxaban, Dabigatran).  
Warfarin if mechanical valve/RHD.

**Timing (NIHSS guided):**

- Mild: Day 3
- Moderate: Day 6-7
- Severe: Day 12-14 post-imaging

# The Secondary Prevention Pillars

## Lipids (The Statin Mandate)

High-intensity therapy for ALL ischaemic stroke/TIA regardless of baseline LDL. Atorvastatin 80mg or Rosuvastatin 40mg.

Target LDL <1.8 mmol/L.

## Blood Pressure

Restart 24-48h post-ischaemic (7 days post-ICH). Target <130/80 mmHg.

First line: ACEi (Perindopril) ± Indapamide (PROGRESS trial) or Calcium Channel Blocker.

## Glycaemic/Metabolic

HbA1c target ≤7.0%.  
SGLT2 inhibitors or GLP-1  
SGLT2 inhibitors or GLP-1 agonists preferred for proven cardiovascular benefit.

## Lifestyle/Structural

Smoking cessation (single best intervention).  
OSA screening (STOP-BANG).  
PFO closure consideration (<60 years, cryptogenic).

# Special Populations Modifier Grid (Part 1)

## Pregnancy & Puerperium



- **Risk:** Elevated 2-3x (especially 3rd trimester to 6w postpartum).
- **Thrombolysis:** Alteplase is Cat B3; use only if life-threatening.
- **Meds:** Warfarin/Statins contraindicated. Use LMWH. Low-dose aspirin is safe.
- **Differentials:** Consider PRES and CVST.

## Paediatrics



- **Aetiology Shift:** Cardiac, moyamoya, sickle cell, prothrombotic (not atherosclerosis).
- **Protocol:** Use adapted FAST. Thrombolysis/EVT not routine; case-by-case at specialist centres.
- **Treatment:** Anticoagulate for dissection/CVST.

# Special Populations Modifier Grid (Part 2)

## Elderly ( $\geq 80$ years)

- Age is no longer an absolute EVT/ Alteplase exclusion.
- **DOAC dose reduction critical** (e.g., Apixaban 2.5mg if  $Wt \leq 60\text{kg}$  or  $Cr \geq 133$ ).
- **Falls alone do not justify withholding anticoagulation.**

## Renal Impairment (eGFR $< 60$ )

- **Avoid Dabigatran** if eGFR  $< 30$ .
- **Enoxaparin** reduced to 20mg SC daily if eGFR  $< 30$ .
- **Caution** with contrast CTA.

## Hepatic Impairment

- **Rivaroxaban** contraindicated in Child-Pugh B/C.
- **Statins** contraindicated in active liver disease.
- **Prefer LMWH** in severe disease over unpredictable Warfarin.

# The Playbook in One Page: The Med2Date Protocol

