

# The THRIVE Score

Outcomes and patient selection in ischemic stroke

# The THRIVE Score

What is your patient's NIH Stroke Scale (NIHSS) score?

What is your patient's age?

Does your patient have a history of hypertension?  YES  
 NO

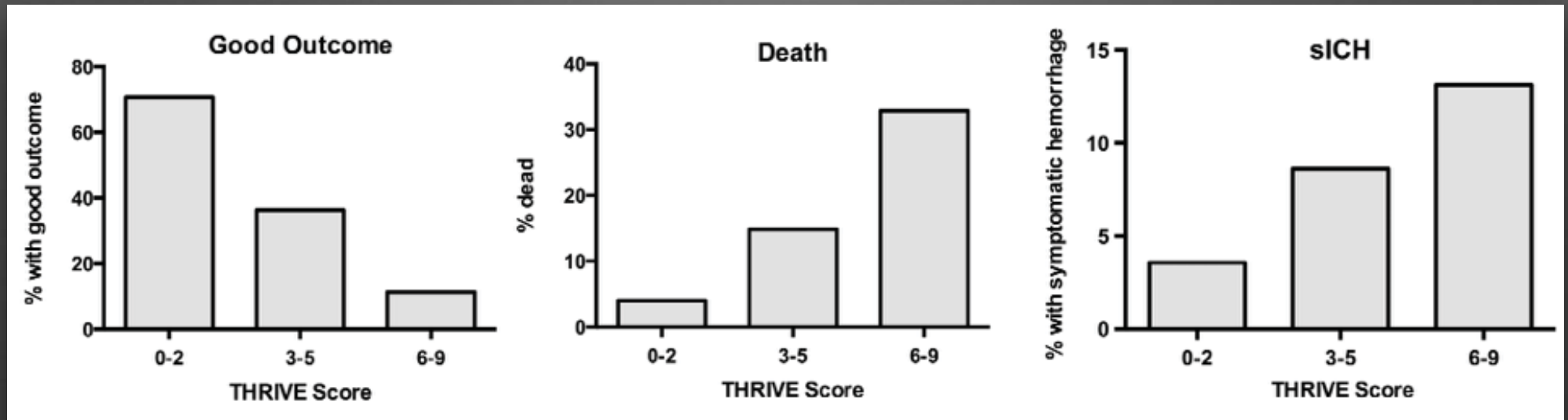
Does your patient have a history of diabetes mellitus?  YES  
 NO

Does your patient have a history of atrial fibrillation?  YES  
 NO

# The THRIVE Score

	Points
<b>NIHSS</b>	
≤10	0
11–20	2
≥21	4
<b>Age</b>	
≤59	0
60–79	1
≥80	2
<b>CDS (1 point each for HTN, DM, AFib)</b>	
0	0
1	1
2	2
3	3
THRIVE score = ____ (0–9)	

# The THRIVE Score



THRIVE works equally well in:

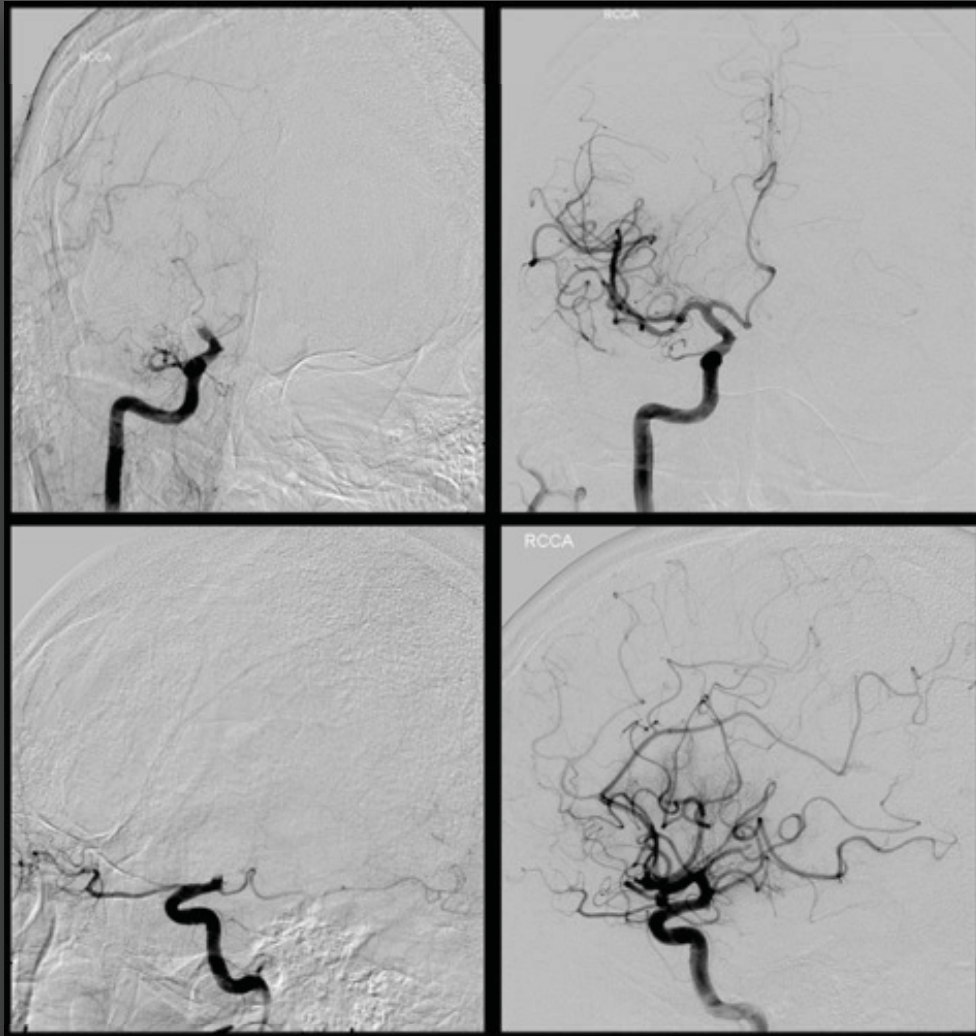
- tPA treatment
- Endovascular Stroke Treatment (EST)
- No acute stroke treatment



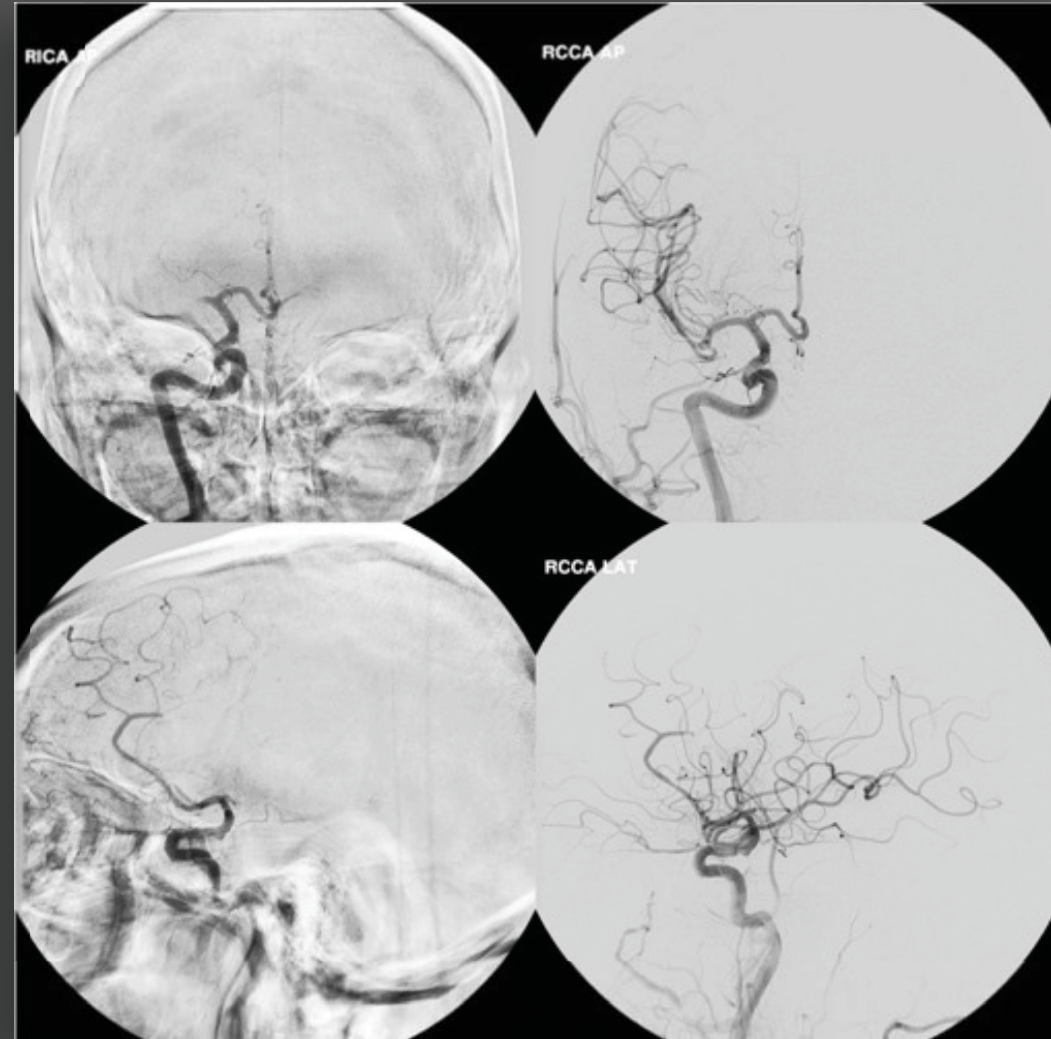
# THRIVE score validation

- MERCI + Multi-MERCI trials (n = 305)
- MERCI Registry (n = 1,000)
- NINDS tPA trial (n = 624)
- VISTA (n = 5,725)
- TREVO-2 (n = 178)
- SWIFT + STAR (n = 349)
- SITS-MOST (n = 6,483)

49 y/o M c hyperchol.  
NIHSS=18



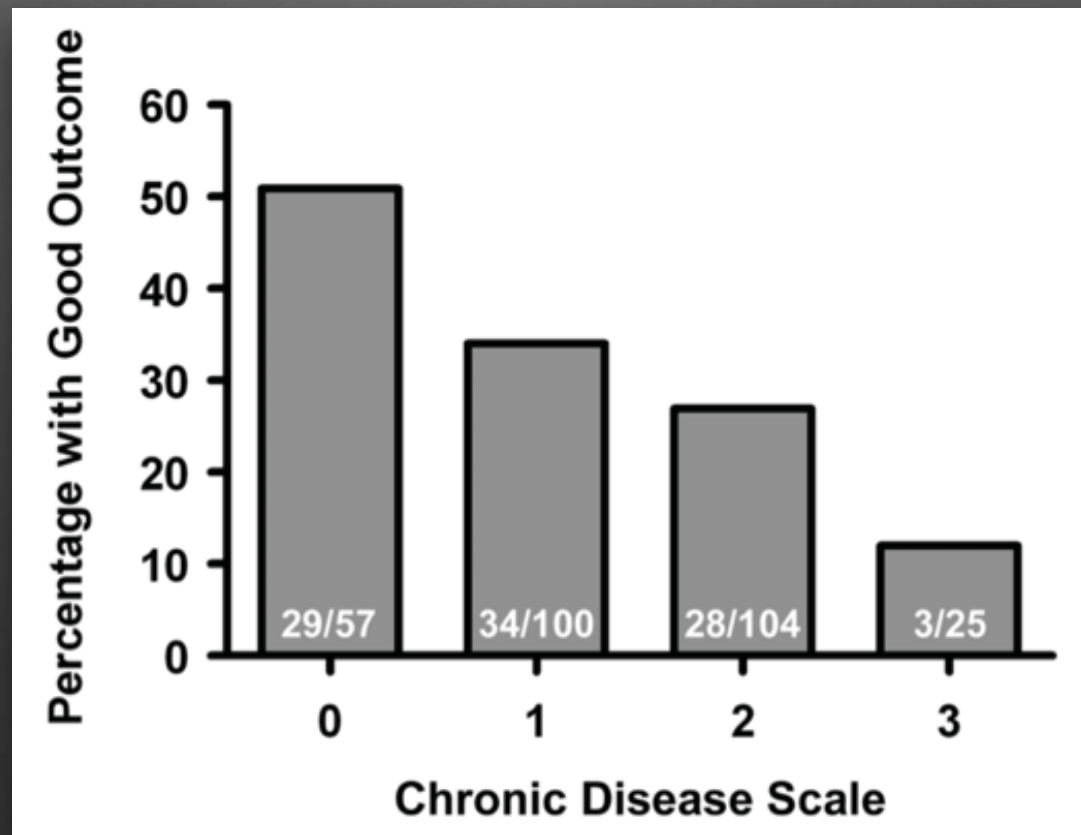
79 y/o F c HTN, DM, hyperchol,  
CAD, PPM, ESRD on HD.  
NIHSS=22



Normal by the next morning.

Completed stroke, malignant MCA  
syndrome, died.

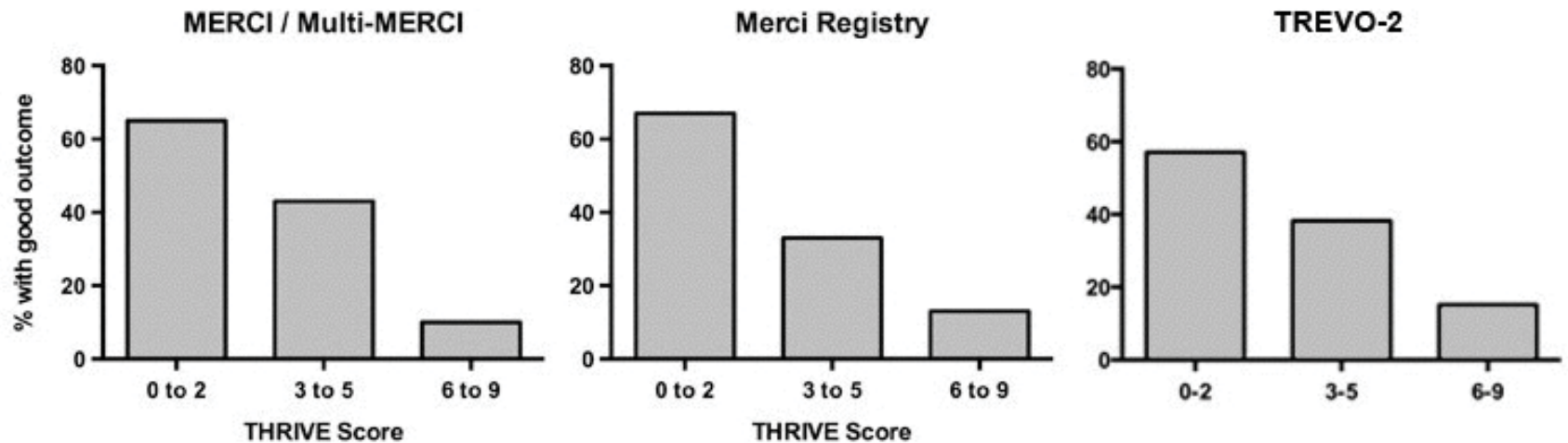
# Chronic Disease Scale ( HTN + DM + AFib )



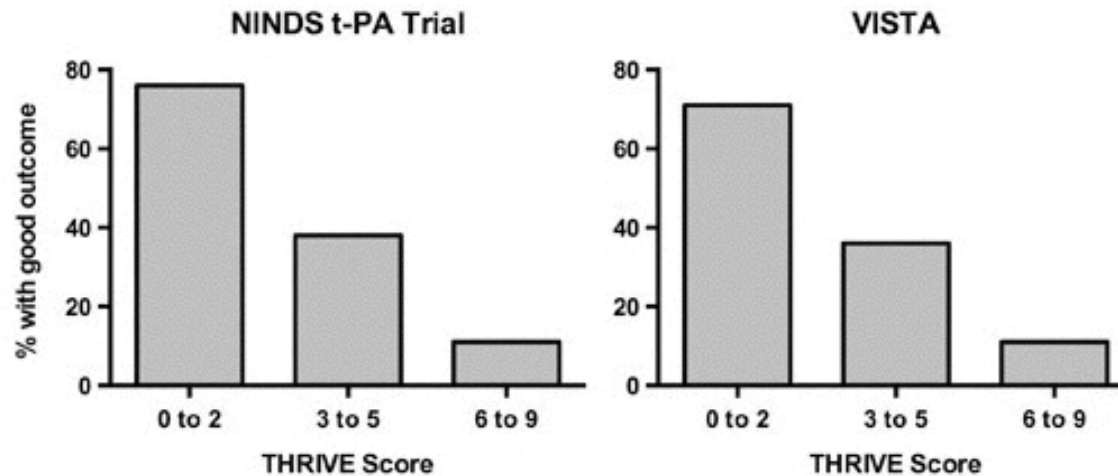


# THRIVE and outcome

EST:



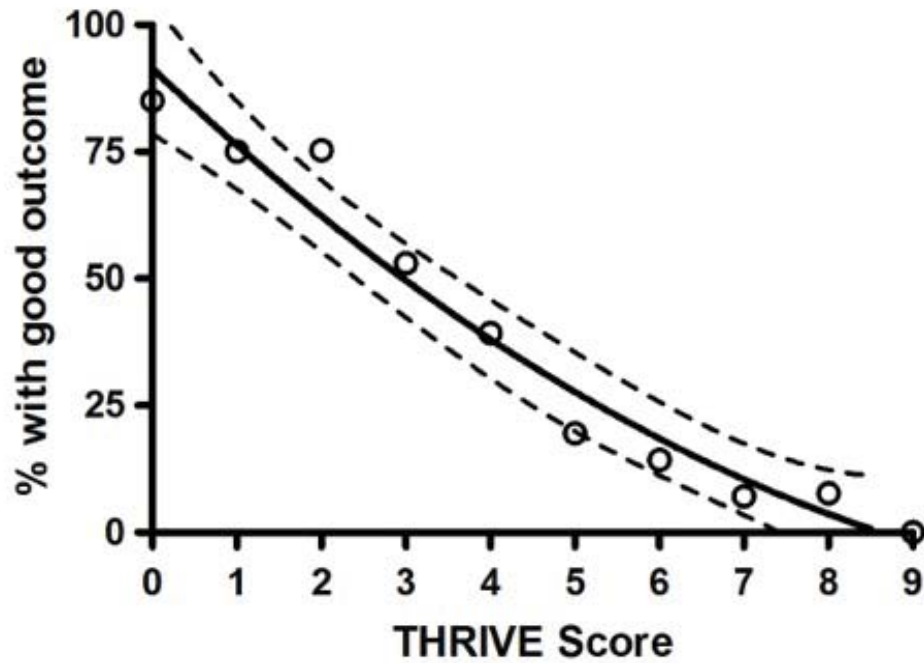
tPA /  
no Rx:



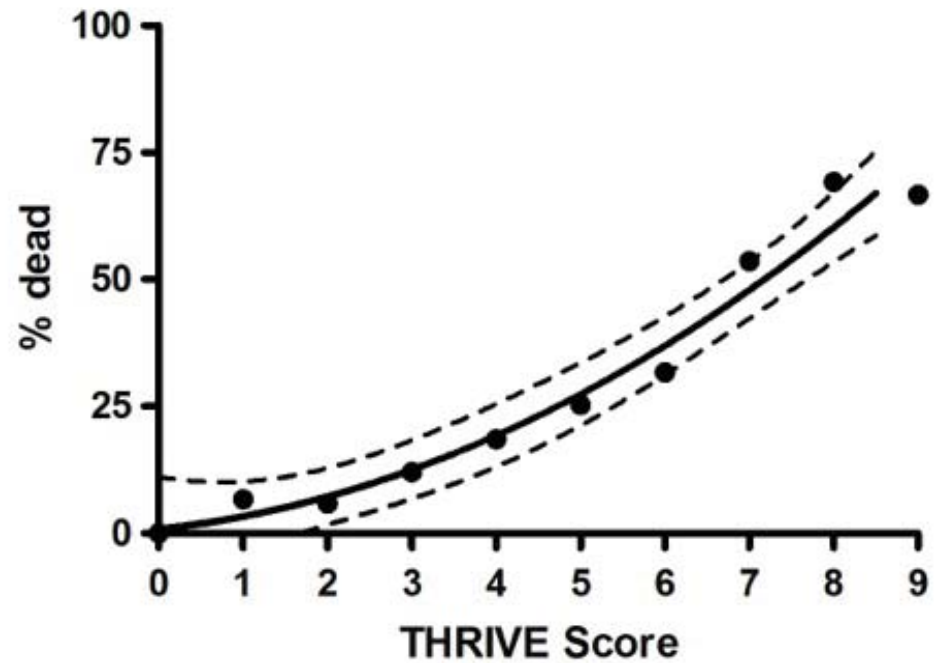


# Continuous THRIVE Score

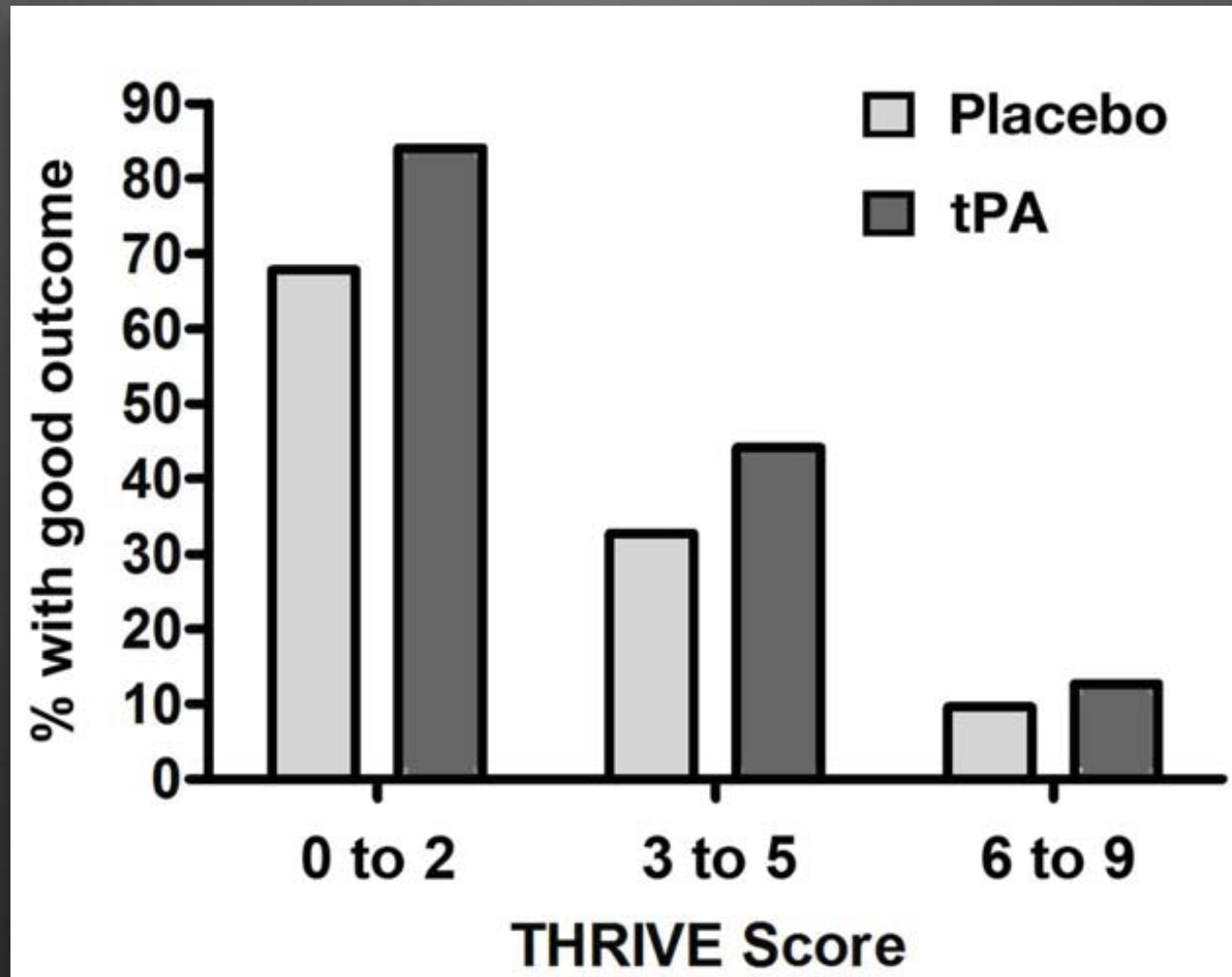
**A**



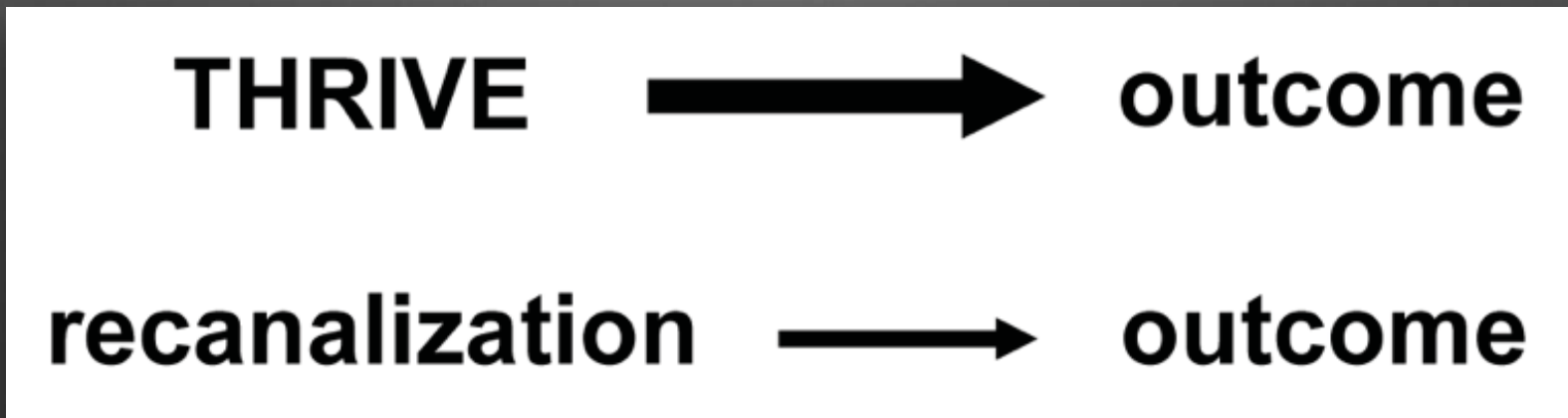
**B**



# THRIVE & tPA



# THRIVE and recanalization



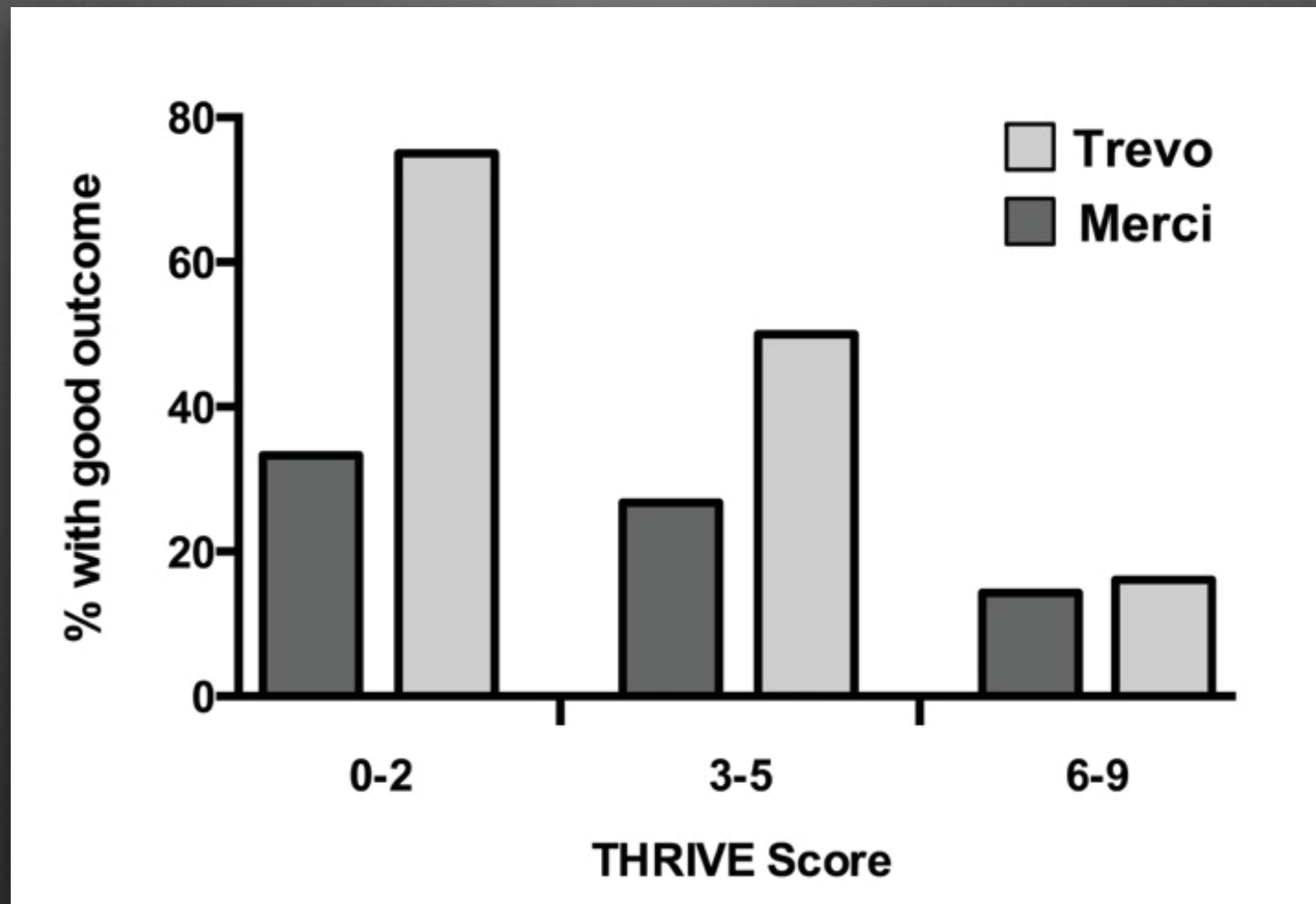


# THRIVE and recanalization

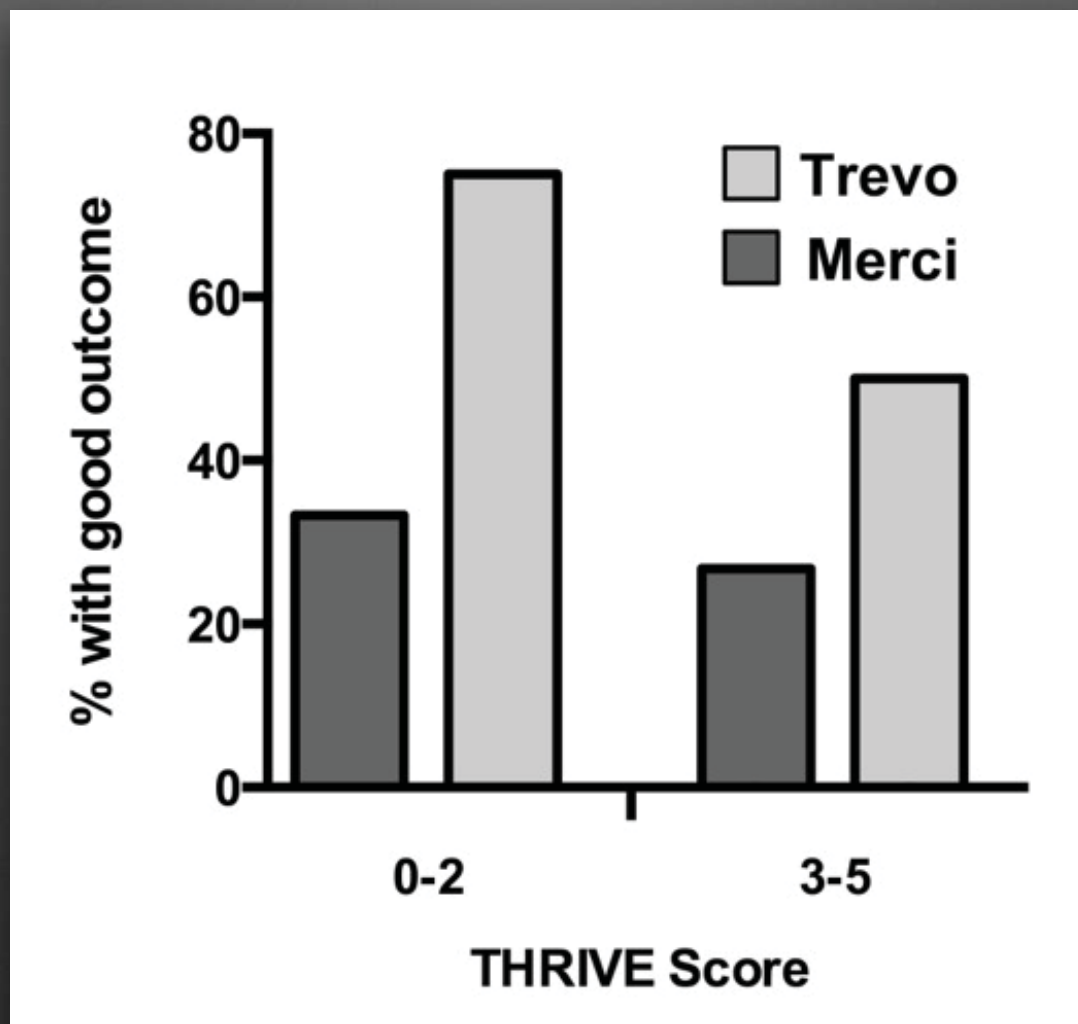
**THRIVE**  **outcome**

**recanalization**  **outcome**

# THRIVE in TREVO-2



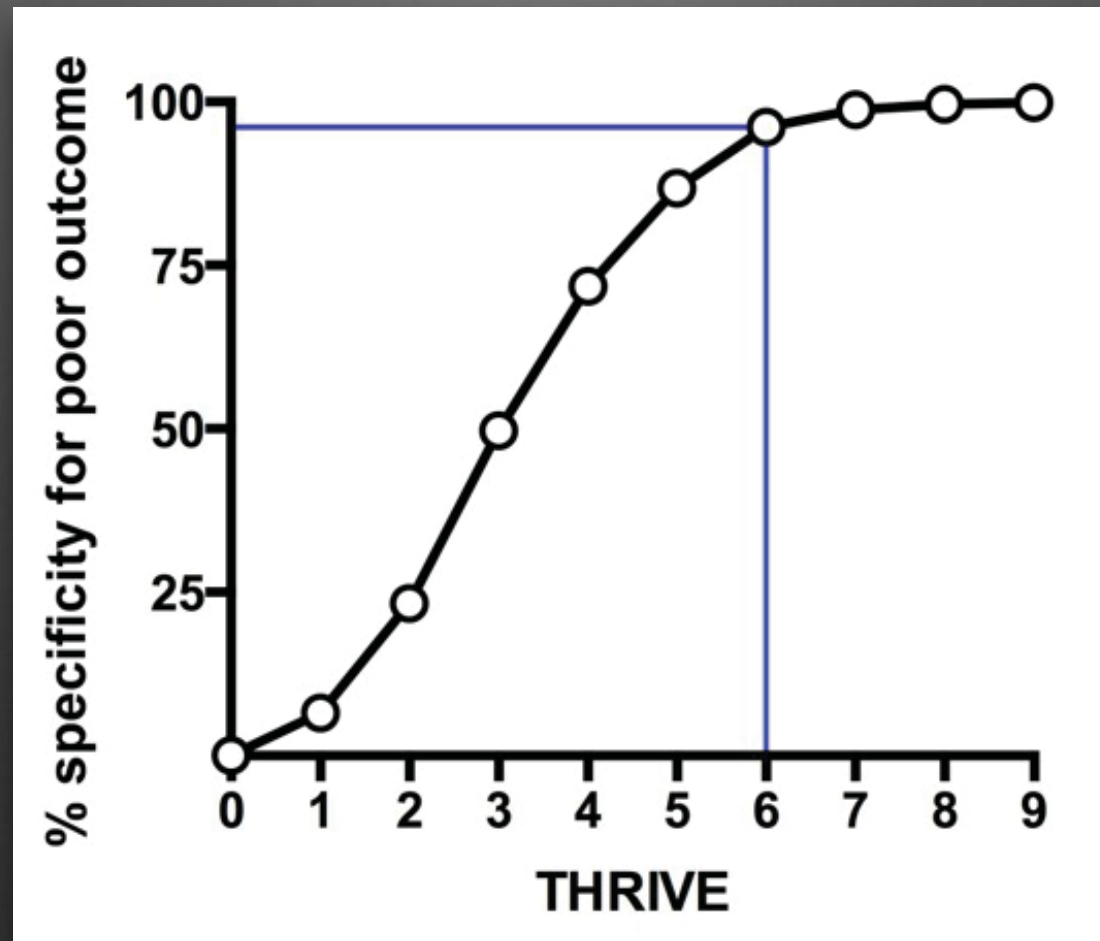
# THRIVE in TREVO-2



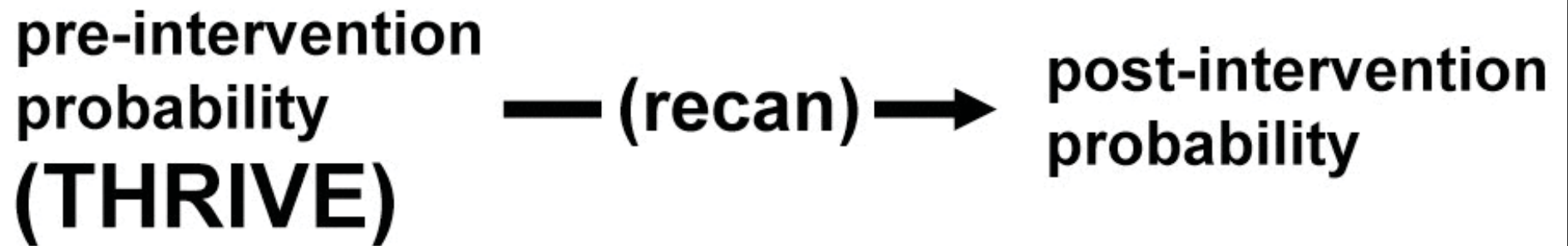


# THRIVE:

## specificity for outcome



# THRIVE & Intervention: a Bayesian model



# Calculating THRIVE:

What is your patient's NIH Stroke Scale (NIHSS) score?

What is your patient's age?

Does your patient have a history of hypertension?  YES  
 NO

Does your patient have a history of diabetes mellitus?  YES  
 NO

Does your patient have a history of atrial fibrillation?  YES  
 NO

MD+CALC  All

### THRIVE Score for Stroke Outcome

Estimates prognosis after an acute ischemic stroke.

Age	<input type="text" value="83"/> years
NIH Stroke Score	<input type="text" value="18"/>
History of Hypertension	+1 <input checked="" type="radio"/> YES <input type="radio"/> NO
History of Diabetes Mellitus	+1 <input checked="" type="radio"/> YES <input type="radio"/> NO
History of Atrial Fibrillation	+1 <input type="radio"/> YES <input checked="" type="radio"/> NO

**6**  
points  
THRIVE Score

**13-25%**  
Good Outcome (Modified Rankin 0-2) at 90 days

**26-54%**  
Mortality at 90 days

[www.thrivescore.org](http://www.thrivescore.org)

[www.mdcalc.com](http://www.mdcalc.com)  
(beta)