

Stroke Belt Consortium

CONGRATULATIONS !!
20 years of service

STROKE FACTS 2014

Incidence:	795,000 /yr
Mortality:	129,000 /yr
Hospital Discharges:	889,000 /yr
Recurrent Stroke:	185,000
Prevalence:	7,000,000
Longevity:	7 years
Cost:	\$ ~30 Billion

MDW 12.060

Stroke Belt Consortium

20 YEAR SELECTED HIGHLIGHTS

Epidemiology

EC/IC Bypass Surgery

Stroke Data Bank

Carotid Endarterectomy

Coverdell Stroke Registry

Thrombolysis

Neuroprotection

Stents

Methodology – Shift Analysis

Thrombectomy

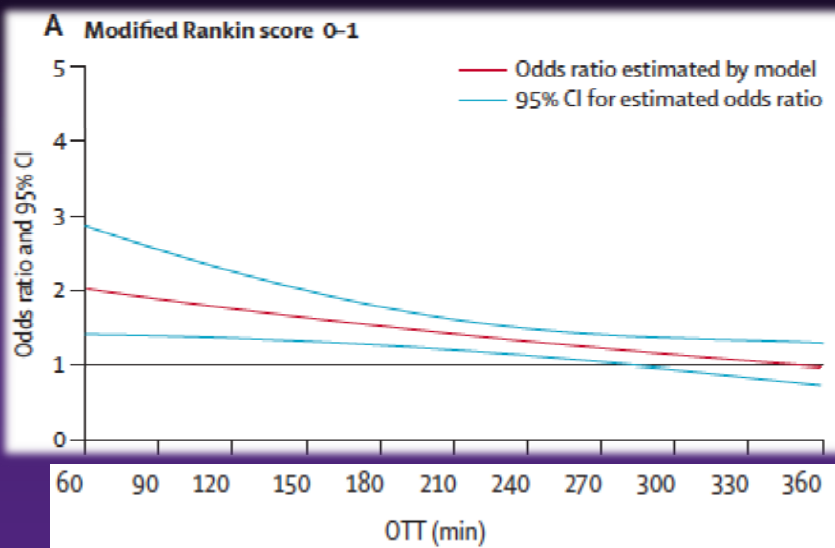
Stroke Belt Consortium

tPA USE IN STROKE

“PENETRANCE 3 - 8%”

- Uninformed Public
- Time
- Fear of hemorrhage (ACEP)
- Facilities and Staffing
- Cost / Reimbursement

TIME to REVASCULARIZATION



Lees et al., Lancet, 2010

Endovascular Trials

STUDY	N	CENTERS	COUNTRY	POP	DURAT-ION Months	Pt/cent/ mo	Adj cOR
MR CLEAN	500	16	Netherlands	16.9m	39.5	0.79	1.67
ESCAPE	316	22	Canada +	35.5m	13.1	1.10	3.1
EXTEND-IA	70	10	Australia +	28.4m	26.4	0.27	2
SWIFT-PRIME	196	39	USA +	319.1m	23.3	0.22	2.63
REVASCAT	206	4	Catalonia, SP	7.5m	25.3	2.03	1.7

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Stroke Belt Consortium CT / MR Imaging

- RAPIDITY 24 / 7 / 365
- STANDARDIZED PARAMETERS - Software
- QUALITY CONTROL - Protocol Driven
- REPRODUCABLE RESULTS
- CENTRAL IMAGING ANALYSIS

BLOOD BRAIN BARRIER

INTRAVASCULAR

Bypass (EC/IC)
Carotid Endarterectomy
Thrombolysis
Thrombectomy

EXTRACELLULAR

Neuroprotection
~175 Failed Trials
'STAIR' Consensus
Models

Stroke Belt Consortium

- The Mechanism of Action Trap
- Every New Drug has to Prove MoA
- ~ 175 Neuroprotection Studies failed
- Back to the Drawing Board
- Basic Research – Different Paradigm
- Contrarian Thinking!

Stroke Belt Consortium 'STAIR' Consensus Conferences

- *"Stroke Drug Development: Bridging the Gap from Animal Research to Human Trials"* 1999
- *"Stroke Drug Development: Improving Clinical Trial Design and Endpoint Selection"* 2001
- *"Stroke Drug Development: Expanding the Scope of Acute Stroke Therapy"* 2003
- *"Acute Stroke Treatment Trials: Enhancing Development, Cooperation and Approval"* 2005
- *"Acute Stroke Treatment Trials: A New Era of Regulatory, Technology and Design Opportunities"* 2007
- *"Acute Stroke Treatment: A Time for Innovation"* 2009
- *"Designing Acute Stroke Therapy For a New Decade"* 2011
- *"Accelerating the Evolution of Stroke Therapy"* 2013

Stroke Belt Consortium Conflict of Interest

- Grave concern that scientists will be corrupted
- A sense of corruption everywhere
- Industry conducts >50% of research

Brain Attack Coalition

- American Academy of Neurology
- American Association of Neurological Surgeons
- American Association of Neuroscience Nurses
- American College of Emergency Physicians
- American Society of Neuroradiology
- ASA/AHA
- CDC
- Congress of Neurological Surgeons
- National Association of Chronic Disease Directors
- National Association of EMS Physicians
- National Association of State EMS Officials
- National Institute of Neurological Disorders and Stroke
- National Stroke Association
- Neurocritical Care Society
- Society of NeuroInterventional Surgery
- Stroke Belt Consortium
- Veterans Administration

Stroke Belt Consortium FUTURE

- Bright
- Refocus
- Better Endovascular equipment, trials
- Blood Brain Barrier
- Cascade of events precipitated by ischemia
- Coordination, collaboration