



SPAN STANDARD EXPERIMENT

#1	LAB INFORMATION	
Report Title		SPAN: Stage 2 Run-in
Report Author		The Coordinating Center
Dates of Experiment		March 2021-June 2021
Responsible Person(s)		Patrick Lyden Cenk Ayata Lauren Sansing Enrique Leira Anil Chauhan Raymond Koehler David Hess Jaroslaw Aronowski Louise McCullough
Location of Experiment		At Sites
#2	Purpose	

Stage 2 Run-In: To verify the feasibility of parameters in the new models under development for Stage 2 (aged mice, obese mice, and SHR rats) including: behavior testing, surgical approach, MRI acquisition, mortality and post-operative handling. Tentative modifications to the MRI protocol have been made intending to optimize scan results in these animals.





#3

REFERENCES TO OTHER SOPS

SPAN SOP 6 Mouse Middle Cerebral Occlusion

SPAN SOP 17 Reperfusion

SPAN SOP 40 Rat Middle Cerebral Occlusion

SPAN SOP 45 Tissue Banking

SPAN SOP 52 Obesity Induced Hyperglycemic Mouse

SPAN SOP 53 Aging Model

SPAN SOP 54 Spontaneously Hypertensive Rat (SHR)

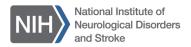
SPAN Stage 2 MRI Acquisition Memo

#4

METHODS

Description	Notes/Observations				
 Sites will assess feasibility of Stage 2 parameters for Surgery, Behavior, and MRI in as many subjects as possible in the two Stage 2/3 models they were assigned: aged mice, obese mice, or SHR. CC has organized weekly huddles on Fridays that 	SPAN SOP 52 Obesity Induced Hyperglycemic Mouse				
 CC has organized weekly huddles on Fridays that will continue into the onset of Stage 2. Sites will share experiences using parameters outlined this experimental protocol. 	SPAN SOP 53 Aging Model SPAN SOP 54 Spontaneously Hypertensive rat (SHR)				
Surgical Approach	Notes/Observations				
Perform right side MCAo according to appropriate protocol. Sites may experiment with keep the animals asleep or awake during the occlusion period. Occlusion Duration by Model Aged Model: 45 min. Obesity Induced Hyperglycemic Model: 45 min. or 60 min. Spontaneously Hypertensive Rats (SHR):	SPAN SOP 6 Mouse Middle Cerebral Occlusion SPAN SOP 40 Rat Middle Cerebral Occlusion SPAN SOP 17 Reperfusion				
60 min. Or 90 min.					





Behavior Testing	Notes/Observations
Perform Corner Test Bolted apparatus moving towards animal Guiding unbolted boards towards animal Testing unbolted boards in rat cage Ways to stimulate turns with Corner Test apparatus	Note: If behavior videos are recorded, these can be uploaded into IDA using the visit code: Stage 2 Pilot. Sites will email spancc@usc.edu when videos are uploaded into this IDA visit code.
Perform Grid Test	
 SHR Grid trials with existing Stage 1 Grid Parameters Proposed apparatus for SHR: 1" 3x3 ft Grid apparatus Ways to stimulate movement on grid 	
MRI Run-in	
Sites will assess feasibility of Day 2 MRI (and Day 29 if the sites wish) scanning using the SPAN Stage 2 MRI Acquisition memo in the two Stage 2/3 models they were assigned: aged mice, obese mice, or SHR. As a reminder of what the Stage 2 MRI protocol entails: 1) Scan n=3 normal brains and n=3 stroked animals for each animal model for each site. You may scan the same animal before and 48 hours after stroke. 2) Obtain RARE + T2 map + ADC map 3) Field of view: Aged mice: original 19.2 mm in-plane x 15 mm in slice direction. Obese mice: original 19.2 mm in-plane x 15 mm in slice direction AND 10% larger (21.12 mm). Spontaneously hypertensive rats (SHR): 25.6 mm in-plane, 0.8 mm slice thickness	SPAN Stage 2 MRI Acquisition Memo





Up Pilot, se MRI grou (spance) uploaded In your e	x density 128 x 128 x 30 slices in all scans. Fat suppression for all scans. Tood these scans into IDA as Visit code Stage 2 Rect the appropriate timepoint and email the up and the Coordinating Center Dusc.edu) when Stage 2 pilot files have been al. Imail include: Inimal ID Inimal ID Inimal Genter Dusc.edu) Inimal Age Inimal Age	
#5	LESSONS LEARNED/ NEXT STEPS	