

The ARIC STUDY: Interviews and Procedures by Examination

PROCEDURES/DATA	V1 1986-90 N=15,792	V2 1990-93 N=14,348	V3 1993-95 N=12,887	V4 1995-99 N=11,656	Brain MRI AS1999.01 2004-06 N=1,067	Carotid MRI 2005-06 N=2,066	V5 2011-13 N=6,538	V5 NCS MRI AS2008.06 2011-13 N=1,968	V6 2016-17 N=4,003	V7 2018-19 N=3,589	V8 telephone 2020 N=3,270	V9 2021-22 N=2105	V10 2022-23 N=1645	V11 2024-25 N=1604
ANTHROPOMETRY (ANT)														
HEIGHT														
Sitting Height	X													
Standing Height	X		X	X	X	X	X							
FRAME SIZE														
Elbow		X												
Wrist	X													
GIRTHS														
Calf	X													X (MNA)
Hip	X	X	X	X		X	X		X	X				
Waist	X	X	X	X		X	X		X	X				
ARM CIRCUMFERENCE (SBP)	X	X	X	X	X	X	X	X	X	X		X	X	X
BIO-IMPEDANCE							X		X	X		X	X	X
SKINFOLDS														
Subscapular	X	X												
Triceps	X	X												
WEIGHT	X	X	X	X	X	X	X		X	X		X	X	X
ABILITY TO STAND							X		X	X		X	X	X

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BLOOD PRESSURE (SBP)														
Sitting (brachial)	X	X	X	X	X	X	X		X	X		X	X	X
Supine (brachial)	X		S	S										
Standing (brachial)	X		S	S										
Ankle	X		X	X			X							
BLOOD PRESSURE MONITORING (ABPM, HBPM)													AS2020. 28	
ORTHOSTATIC HYPOTENSION													AS2019. 22	
CT SCAN (CPC, CPS, CRE, CTR)										AS2016. 06				
GUT MICROBIOME (GMC, GMH)									AS2016. 15	AS2016. 15				

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HEARING EXAM (AUD)									X	X			X	
HEARING QUESTIONNAIRE (HNES)									X			X	X	X
ACHIEVE HEARING INTERVENTION										AS2016. 03	AS2016.0 3	AS2016. 03		
ACHIEVE MRI										AS2017. 26	AS2017.2 6	AS2017. 26		
ACHIEVE HIFU												AS2021. 09	AS2021. 09	AS2021. 09
ACHIEVE BHFU												AS2021. 11	AS2021. 11	AS2021. 11
HEART RATE (ECG)	X	X	X	X	X	X	X		X					
ECHOCARDIOGRAPHY (ECH)														
Jackson			X											
All Field Centers							X			AS2015. 34				AS2022. 03
ABDOMINAL AORTA SCAN (AAT, AAO)							X							
ELECTROCARDIOGRAMS														
2-Minute Rhythm Strip	X													
12-Lead	X	X	X	X			X							
Heart Rate Variability	X v1ecg	X v2ecg	X v3ecg	X v4ecg										
EPATCH/ZIOPATCH									AS2015. 29	AS2015. 29		AS2020. 26	AS2020. 26	AS2022. 03

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CONTINUOUS GLUCOSE MONITORING												AS2020. 26	AS2020. 26	AS2020. 26
PULSE WAVE VELOCITY (PWV)							X		AS2015. 23	AS2015. 23				
GLYCEMIC LOAD (GTA, GTS)				X		X			X					
MRI														
CEREBRAL										AS2015. 32.	X			
Forsyth County			X		X			X	AS2015. 32					
Jackson			X		X			X	AS2015. 32					
Minneapolis								X	AS2015. 32					
Washington County								X	AS2015. 32					
CAROTID						X								
PET SCANS								AS2009.29	AS2013. 13	AS2013. 13	X			
PYP												AS2018.26		
PERIPHERAL NEUROPATHY (PNF)									X				AS2021. 04	
PERIODONTAL EXAMINATION (DSR)				AS1995.06										

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PHYSICAL EXAMINATION (PHE)														
Walking/Standing	X	X			X		X		X	X				
Neck	X	X												
Cardiopulmonary	X	X												
Lung Sounds	X						X							
Breast	X													
Lower extremities	X	X										X (PYP)		X (PYP)
GEOCODED POLUTION	AS2020. 09	AS2020. 09	AS2020. 09	AS2020. 09			AS2020. 09		AS2020. 09	AS2020. 09				
SPECIMEN COLLECTION (BIO)														
Blood	X	X	X	X	X	X	X		X	X		X	X	X
Urine				X		X	X		X	X		X	X	X
Saliva						X			AS2016. 15	AS2016. 15				
PULMONARY FUNCTION (PULM, PULB, PULP)														
FEV ₁	X	X					X							
FVC	X	X					X							
Max. Inspir. Pressure		X												

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RETINAL PHOTOGRAPHY (REX, RIP, RLB, RET)			X			X		X		AS2014. 38				
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ULTRASOUND (B-MODE)														
Carotid arteries	X	X	X	X										
Distensibility	X	X												
Popliteal artery	X													
VENIPUNCTURE														
CHEMISTRIES														
Glucose	X	X	X	X		X	X		X	X				
Creatinine	X	X		X		X	X		X	X		X	X	X
Insulin	X			X			X							
Total Protein	X													
Glycated Albumin												X	X	
Albumin	X						X		X	X		X	X	X
Uric Acid	X	X		X			X							
Urea Nitrogen	X													
Calcium	X													
Phosphorous	X													
Magnesium	X	X							X	X		X	X	X
Sodium	X	X												

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Potassium	X	X							X	X		X	X	X
Glucose Tolerance				X										
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HbA1c		AS2006.15				X	X		X	X		X	X	X
Thyroid Stimulating Hormone (TSH)		AS2009.16					X							
Thyroxine (T4)		AS2009.16					X							
Triiodothyronine (T3)		AS2009.16					X							
Anti-Thyroid Peroxidase(TPO antiibody)		AS2009.16					X							
Vitamin B12								X						
Vitamin D		AS2009.17												
Cystatin-C							X		X	X		X	X	X
High Sensitive C-Reactive Protein		AS2009.16		AS2006.16			X		X	X		X	X	X
High Sensitive Troponin-T				AS2008.10			X		AS2009.16	AS2015.26				
NT-proBNP		AS2008.12/2009.16		AS2008.10			X		AS2009.16	AS2015.26				
Fructosamine									X	X		X	X	X

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1,5-anhydroglucitol									X	X		X	X	X
Beta-2 Microglobulin									X	X				
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Aspartate transaminase									X	X				
Alanine transaminase									X	X				
G-glutamyl transferase									X	X				
HEMOGRAM														
Hematocrit	X	X					X		X	X				
Hemoglobin	X	X					X		X	X		X	X	X
Glyc. Hemoglobin														
White Blood Cell Count	X	X					X		X	X				
Red Blood Cell Count							X		X	X				
Mean Cell Volume		X					X		X	X				
Platelet Count	X	X					X		X	X				
Mean Platelet Volume									X	X				
Neutrophil Count	X	X												
Neutrophil Bands	X	X												
Granulocyte							X							
Granulocyte percentage							X							
Lymphocytes	X	X					X							
Lymphocyte percentage							X							

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Monocytes	X	X					X							
Monocyte percentage							X							
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Eosinophils	X	X												
Basophiles	X	X												
Mean Corpuscular hemoglobin							X		X	X				
Mean Corpuscular hemoglobin concentration							X		X	X				
Red cell distribution width							X		X	X				
HEMOSTASIS														
Factor VIII Chromogenic	AS2012. 12	AS2012. 12	AS2012. 12	AS2012. 12										
Factor VII	X													
Activated PTT (aPTT)	X													
Fibrinogen	X	S	S	S										
Von Willebrand Factor	X													
Protein C	X													
Antithrombin III (AT-III)	X													
D-Dimer			AS1998. 03											
Fibrinogen			AS1998.											

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			03											
LIPIDS														
HDL Subfractions	X													
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Apo AI	X	X												
Apo B	X	X		AS2006.16										
Total Cholesterol	X	X	X	X		X	X		X	X		X	X	X
Total Triglyceride	X	X	X	X		X	X		X	X		X	X	X
HDL Cholesterol	X	X	X	X		X	X		X	X		X	X	X
LDL Cholesterol	X	X	X	X		X	X		X	X		X	X	X
Lipoprotein [a]	X			AS2010.12										
Remnant LP-C						X								
Sickle Cell	AS2010.16													
URINE SPECIMEN														
CHEMISTRIES														
Creatinine				AS2002.02		X	X		X	X		X	X	X
Microalbumin				AS2002.02		X	X		X	X		X	X	X
Albumin/Creatinine Ratio				AS2002.02			X		X	X		X	X	X

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INTERVIEWS														
Access and Quality of Care (AQC)							X							
Blood Transfusion (HHX)				X										
Cognitive Function (CNF)		X	X	X	X	X	X							
COVID Questionnaires (COV, CVL, CVP)											AS2020. 37	AS2020. 37	AS2020. 37	
Diabetes (DQF, DTS)									X	AS2009. 16				
Dietary Intake (DTI)	X	S	X	S										
Epworth Sleepiness Scale (ESS)									X	X				X
Falls (FCF, FCL, FES, FRC, FRM)									X	AS2013. 10				
Family History of CHD, Cancer (HOM, FHX))	X	X			X									
Fasting Status (FTR)	X	X	X	X			X							
Health History (MHX, HHX)	X	X	X	X	X									
Home Interview (HOM)	X													

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Inflammation (INF)				X										
Informed Consent (ICT)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jenkins Sleep Questionnaire (JSQ)														X
Medication Survey (MSR)	X	X	X	X	X	X	X		X	X	X	X	X	X
Mini Nutritional Assessment (MNA)														X
Personal History (PHX)			X	X	X	X	X		X					
Physical Ability (PAQ)				X	X				X					
Physical Activity (RPA, PAC)	X	AS1993 .01	X		X	X	X		X	X		X	X	X
Physical Function (PFX)							X		X	X		X	X	X
Reproductive History (RHX)	X	X	X	X										
Respiratory Questionnaire (RSX)										X				X
Respiratory Symptoms (RPA)	X	X					X			X				
Modified SF12 Health Survey (SFE)							X		X					
Smoking and Alcohol Use (ALC)							X		X	X		X		

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Social Support (HPA)		X												
Socioeconomic Status (SES)				AS1998.02										
TIA/Stroke (TIA)	X	X	X	X	X	X								
Trait Anger (HPC)		X		X										
Two Minute Walk (TMW)									X	X		X	X	X
Vital Exhaustion (HPB)		X												
Vitamin Survey (VIT)			X		X									
NEUROCOGNITIVE TESTS														
Neurocognitive Test Battery (MMSE, DWR DSS WFT)					X			X	X	X		X		X
CES Depression (CES)					X	X	X		X	X	X	X	X	X
Mini-Mental State (MME)							X		X	X		X		X
Subjective Memory (SMF)							X							
Clinical Dementia Rating (CDR)								X	S	X		X		X
Hachinski Ischemic Scale (HIS)								X						
Neurologic History (NHX)								X	X	X		X		X
Neurologic Family History (NFH)								X						

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Neuropsychiatric Inventory (NPI)								X	S	X	X	X		X
Physical & Neurological Exam (PNE)								X		X				
Unified Parkinson's Disease Rating (UPR)					X			X				X		
Psychosocial Wellbeing (PSI, PSP, PWX)											X			
Income (HOM, PHX, SES)	X		X	X		X	X		X					
Marital Status (AFU)														
Handedness (HHX)		X												
Male Baldness (ANT)				X										
WEARABLE DEVICES														
Accelerometer (ACC)											X	X		X
Fitbit														X
Sleep Profiler														X
Watchpat														X

S=Sample of Cohort