

SUPPLEMENTAL MATERIAL

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Supplemental Table 1. Demographic and clinical characteristics of patients with ADPKD without and with pre-symptomatic screening for intracranial aneurysms			
		Without	With
Gender	Female, n (%)	1059 (53)	459 (57)
Age	Years, mean (SD)	49 (17)	51 (13)
Race	White, n (%)	1663 (83)	730 (90)
	Other or not disclosed	343 (17)	82 (10)
Genotype	Available, n (%)	513 (26)	360 (44)
	PKD1 Truncating	231 (45)	173 (48)
	PKD1 Non Truncating	180 (35)	111 (31)
	PKD2	102 (20)	38 (11)
Hypertension, n (%)		1468 (73)	631 (78)
Dyslipidemia, n (%)		735 (37)	393 (48)
Smoking, n (%)		291 (15)	197 (24)
CKD Stage	Available, n (%)	1658 (83)	805 (99)
	Stage 1-2, n (%)	747 (45)	253 (31)
	Stage 3-4, n (%)	704 (42)	326 (41)
	ESKD, n (%)	207 (13)	226 (28)

Supplemental Table 2. Summary of IA locations

Location	Present study		Jiang et al		Flahault et al	
	Number	%	Number	%	Number	%
Total	94	---	54	---	22	---
Anterior circulation	83	88	54	100	21	95
ICA	30	32	26	48	11	50
MCA	35	37	14	26	4	18
ACoA	11	12	13	24	5	23
ACA	3	3	1	2		
PA	2	2				
OA	2	2				
Ant choroidal					1	5
Posterior circulation	11	12			1	5
SCA	3	3			1	5
BA	4	4				
PCA	1	1				
PCoA	2	2				
PICA	1	1				

Anterior circulation - ICA: Internal Carotid Artery, MCA: Middle Cerebral Artery, ACoA: Anterior Communicating Artery, ACA: Anterior Cerebral Artery, PA: Pericallosal Artery, OA: Ophthalmic Artery.

Posterior circulation - PCoA: Posterior Communicating Artery, SCA: Superior Cerebellar Artery, BA: Basilar Artery, PCA: Posterior Cerebral Artery, PICA: Posterior Inferior Cerebellar Artery.

Supplemental Table 3. Comparison between patients with Enlarged and Stable Aneurysms

Variable	Stable aneurysms (n =70)	Enlarged aneurysms (n = 8)	Overall (n = 78)
Gender (% M:F)	22:47 (28:72)	4:4 (50:50)	22:47 (31:69)
Mean Age at the 1st MRA (SD)	52 (10)	46 (12)	52 (11)
Location Anterior (%)	60 (86)	7 (88)	66 (85)
Mean Imaging FU, months (SD)	64 (74)	146 (96)	72 (79)
HBP (%)	63 (90)	8 (100)	78 (91)
Dyslipemia (%)	36 (51)	4 (50)	40 (51)
Smoker (%)	34 (49)	5 (63)	37 (47)
Family history of aneurysms (%)	30 (38)	5 (63)	35 (45)

Supplemental Table 4. Clinical characteristics of the patients with clipped or coiled intracranial aneurysms during follow-up

Case #	3	270	317	367	446	511	604
Age	68	43	46	59	50	48	58
Gender	M	F	F	M	F	F	F
Location	ICA	BA	R MCA	ACoA	R MCA	PCoA	R OA
Shape	Bilobed	Smooth	Pointed	Pointed	Smooth	Bilobed	Smooth
Size (mm)	12	3	5	10	10	8	7
Treatment	Coiled	Clipped*	Clipped	Clipped	Clipped	Clipped	Coiled
Complications	None	None	Headache	Transient behavioral change	None	Headache	None
Time to last MRA (months)	23	79	93	12	56	10	27
Outcome	Incomplete occlusion of posterior lobe; additional 5 mm MCA IA unchanged	Indeterminate study due to clip artifact	MCA/ anterior temporal territory infarct	Left frontal infarct	Additional 2 mm left SCA IA unchanged	Good IA clipping	Occluded aneurysm

- Surgery recommended and performed at a different medical center

M: Male, F: Female, R: Right, ICA: Internal Carotid Artery, MCA: Middle Cerebral Artery, ACoA: Anterior Communicating Artery, OA: Ophthalmic Artery, PCoA: Posterior Communicating Artery, BA: Basilar Artery, SCA: Superior cerebellar artery..

Supplemental Table 5. Clinical characteristics of the patients who died during follow-up and causes of death

Case #	Initial screening		Time (months) from screening to death	eGFR at initial screen	Last follow-up		Cause of death
	Age, gender	Location and size of largest IA			eGFR at last follow-up	Comorbidities	
41	58 F	BA 3	125	HD	Kidney TX	Failed kidney TX x 4	ESKD, multiple infections
79	59 F	L MCA 10	108	HD	HD	CAD, PVD, ICM, AF	Hemorrhagic shock
88	72 F	ICA 2	157	39	ESKD	HT, HL	ESKD, declined dialysis
126	47 F	R MCA 5	62		ESKD	HT, smoking	ESKD
132	52 M	L ICA 7	1			HT, smoking	Motor vehicle accident
166	63 M	R MCA 3	48	Kidney TX	Kidney TX	HT	PTLD
167	76 F	L MCA 2	129	48	18	HT, HL	Metastatic lung cancer
176	70 F	L ICA 3	136	9	Kidney TX	HT, HL	ESKD, encephalopathy
212	42 M	L SCA 3	197	104	104	Smoking, Prostatic carcinoma	Unknown
218	43 M	ACoA 5	119	30	HD	HT, HL, smoking, severe PLD, SCC	ESKD, fall with head injury
231	60 F	L ICA 5	24	81	55	HT, Massive PLD	Recurrent ascites, wasting
242	61 M	R PA	70	Kidney TX	Kidney TX	HT, Liver TX	PTLD
559	52 F	L MCA	1	HD	HD	HT, Massive PLD	Complications from liver surgery

ICA: Internal Carotid Artery, MCA: Middle Cerebral Artery, ACoA: Anterior Communicating Artery, PA: Pericallosal Artery, PCoA: Posterior Communicating Artery, SCA: Superior Cerebellar Artery, BA: Basilar Artery.

TX: transplant. HD: Hemodialysis. HT: Hypertension. ESKD: End-stage kidney disease. HL: Hyperlipidemia. CAD: Coronary artery disease. PVD: Peripheral vascular disease. ICM: Ischemic cardiomyopathy. AF: Atrial fibrillation. SCC: Squamous cell carcinoma. PLD: Polycystic liver disease. PTLD: Post-transplant lymphoproliferative disease.