Supplemental Material

Research Participants' Perspectives on Precision Diagnostics for Alzheimer's Disease

Supplementary Table 1. Psychological outcomes among participants with no cognitive impairment

impairment		
	PET negative	PET positive
	(N = 15)	(N=4)
Relieved		
Strongly Disagree	0 (0.0%)	0 (0.0%)
Disagree	0 (0.0%)	0 (0.0%)
Neither Agree nor Disagree	2 (13.3%)	3 (75.0%)
Agree	1 (6.7%)	0 (0.0%)
Strongly Agree	10 (66.7%)	1 (25.0%)
Missing	2 (13.3%)	0 (0.0%)
Нарру		
Strongly Disagree	0 (0.0%)	0 (0.0%)
Disagree	0 (0.0%)	0 (0.0%)
Neither Agree nor Disagree	3 (20.0%)	4 (100.0%)
Agree	2 (13.3%)	0 (0.0%)
Strongly Agree	6 (40.0%)	0 (0.0%)
Missing	4 (26.7%)	0 (0.0%)
Uncertain about my risk of developing Alzheimer's dise	ase or other dementia.	,
Strongly Disagree	4 (26.7%)	0 (0.0%)
Disagree	2 (13.3%)	1 (25.0%)
Neither Agree nor Disagree	3 (20.0%)	1 (25.0%)
Agree	4 (26.7%)	1 (25.0%)
Strongly Agree	0 (0.0%)	1 (25.0%)
Missing	2 (13.3%)	0 (0.0%)
Uncertain about my child(ren)s and/or family's risk of de	eveloping Alzheimer's disea	se or other dementia.
Strongly Disagree	2 (13.3%)	0 (0.0%)
Disagree	2 (13.3%)	1 (25.0%)
Neither Agree nor Disagree	4 (26.7%)	1 (25.0%)
Agree	5 (33.3%)	1 (25.0%)
Strongly Agree	0 (0.0%)	1 (25.0%)
Missing	2 (13.3%)	0 (0.0%)
Frustrated that there is no good prevention or cure for Al	Izheimer's disease or other d	lementia.
Strongly Disagree	1 (6.7%)	0 (0.0%)
Disagree	0 (0.0%)	1 (25.0%)
Neither Agree nor Disagree	2 (13.3%)	0 (0.0%)
Agree	5 (33.3%)	0 (0.0%)
Strongly Agree	4 (26.7%)	3 (75.0%)
Missing	3 (20.0%)	0 (0.0%)
Concerned about how my insurance status may be affect		
Strongly Disagree	6 (40.0%)	0 (0.0%)
Disagree	2 (13.3%)	1 (25.0%)
Neither Agree nor Disagree	4 (26.7%)	1 (25.0%)

Agree	1 (6.7%)	1 (25.0%)			
Strongly Agree	0 (0.0%)	1 (25.0%)			
Missing	2 (13.3%)	0 (0.0%)			
Concerned it will be difficult to talk to my family mem	bers about my results.				
Strongly Disagree	5 (33.3%)	2 (50.0%)			
Disagree	8 (53.3%)	2 (50.0%)			
Neither Agree nor Disagree	0 (0.0%)	0 (0.0%)			
Agree	0 (0.0%)	0 (0.0%)			
Strongly Agree	0 (0.0%)	0 (0.0%)			
Missing	2 (13.3%)	0 (0.0%)			
Confident that my test results will help me plan for the	future.				
Strongly Disagree	2 (13.3%)	1 (25.0%)			
Disagree	1 (6.7%)	0(0.0%)			
Neither Agree nor Disagree	1 (6.7%)	1 (25.0%)			
Agree	5 (33.3%)	1 (25.0%)			
Strongly Agree	4 (26.7%)	1 (25.0%)			
Missing	2 (13.3%)	0 (0.0%)			
Regretful about having testing.	Regretful about having testing.				
Strongly Disagree	10 (66.7%)	1 (25.0%)			
Disagree	2 (13.3%)	1 (25.0%)			
Neither Agree nor Disagree	1 (6.7%)	1 (25.0%)			
Strongly Agree	0 (0.0%)	1 (25.0%)			
Missing	2 (13.3%)	0 (0.0%)			

Supplementary Table 2. Psychological outcomes among participants with mild cognitive impairment

Impairment	PET Negative	PET Positive
	(N = 5)	$\frac{1211030000}{(N=34)}$
Relieved	(11 3)	(11 31)
Strongly Disagree	0 (0.0%)	3 (8.8%)
Disagree	0 (0.0%)	9 (26.5%)
Neither Agree nor Disagree	2 (40.0%)	12 (35.3%)
Agree	2 (40.0%)	7 (20.6%)
Strongly Agree	0 (0.0%)	1 (2.9%)
Missing	1 (20.0%)	2 (5.9%)
Нарру	= (= 0.00.1)	_ (*****)
Strongly Disagree	0 (0.0%)	10 (29.4%)
Disagree	1 (20.0%)	9 (26.5%)
Neither Agree nor Disagree	2 (40.0%)	9 (26.5%)
Agree	1 (20.0%)	2 (5.9%)
Strongly Agree	0 (0.0%)	0 (0.0%)
Missing	1 (20.0%)	4 (11.8%)
Uncertain about my risk of developing Alzheimer		,
Strongly Disagree	0 (0.0%)	7 (20.6%)
Disagree	1 (20.0%)	7 (20.6%)
Neither Agree nor Disagree	3 (60.0%)	6 (17.6%)
Agree	0 (0.0%)	7 (20.6%)
Strongly Agree	0 (0.0%)	3 (8.8%)
Missing	1 (20.0%)	4 (11.8%)
Uncertain about my child(ren)s and/or family's ris	k of developing Alzheimer's diseas	e or other dementia.
Strongly Disagree	0 (0.0%)	2 (5.9%)
Disagree	0 (0.0%)	5 (14.7%)
Neither Agree nor Disagree	4 (80.0%)	8 (23.5%)
Agree	0 (0.0%)	7 (20.6%)
Strongly Agree	0 (0.0%)	7 (20.6%)
Missing	1 (20.0%)	5 (14.7%)
Frustrated that there is no good prevention or cure	for Alzheimer's disease or other de	mentia.
Strongly Disagree	0 (0.0%)	0 (0.0%)
Disagree	0 (0.0%)	1 (2.9%)
Neither Agree nor Disagree	0 (0.0%)	5 (14.7%)
Agree	4 (80.0%)	7 (20.6%)
Strongly Agree	0 (0.0%)	17 (50.0%)
Missing	1 (20.0%)	4 (11.8%)
Concerned about how my insurance status may be	affected.	
Strongly Disagree	2 (40.0%)	5 (14.7%)
Disagree	0 (0.0%)	8 (23.5%)
Neither Agree nor Disagree	2 (40.0%)	11 (32.4%)
Agree	0 (0.0%)	4 (11.8%)
Strongly Agree	0 (0.0%)	2 (5.9%)
Missing	1 (20.0%)	4 (11.8%)
Concerned it will be difficult to talk to my family	members about my results.	
Strongly Disagree	1 (20.0%)	5 (14.7%)
Disagree	1 (20.0%)	7 (20.6%)

Neither Agree nor Disagree	2 (40.0%)	7 (20.6%)
Agree	0 (0.0%)	9 (26.5%)
Strongly Agree	0 (0.0%)	1 (2.9%)
Missing	1 (20.0%)	5 (14.7%)
Confident that my test results will help me plan for the futu	re.	
Strongly Disagree	0 (0.0%)	0 (0.0%)
Disagree	0 (0.0%)	2 (5.9%)
Neither Agree nor Disagree	0 (0.0%)	6 (17.6%)
Agree	4 (80.0%)	17 (50.0%)
Strongly Agree	0 (0.0%)	6 (17.6%)
Missing	1 (20.0%)	3 (8.8%)
Regretful about having testing.		
Strongly Disagree	2 (40.0%)	19 (55.9%)
Disagree	1 (20.0%)	4 (11.8%)
Neither Agree nor Disagree	1 (20.0%)	6 (17.6%)
Agree	0 (0.0%)	0 (0.0%)
Strongly Agree	0 (0.0%)	1 (2.9%)
Missing	1 (20.0%)	4 (11.8%)

Supplementary Table 3. Utility of genetic testing by PET imaging result.

Supplementary Table 3. Utility of go			Tr. 4.1	
	PET Negative	PET Positive	Total	
	(N = 25)	(N = 63)	(N = 88)	p
Accurately identify my risk of dementia		2 (2 20()	2 (2 20()	0.573
Strongly Disagree	0 (0.0%)	2 (3.2%)	2 (2.3%)	
Disagree	1 (4.0%)	3 (4.8%)	4 (4.5%)	
Neither Agree nor Disagree	4 (16.0%)	18 (28.6%)	22 (25.0%)	
Agree	12 (48.0%)	22 (34.9%)	34 (38.6%)	
Strongly Agree	8 (32.0%)	15 (23.8%)	23 (26.1%)	
Missing	0 (0.0%)	3 (4.8%)	3 (3.4%)	
Influence decisions I make about my me				0.116
Strongly Disagree	0 (0.0%)	2 (3.2%)	2 (2.3%)	
Disagree	1 (4.0%)	7 (11.1%)	8 (9.1%)	
Neither Agree nor Disagree	1 (4.0%)	13 (20.6%)	14 (15.9%)	
Agree	15 (60.0%)	26 (41.3%)	41 (46.6%)	
Strongly Agree	8 (32.0%)	12 (19.0%)	20 (22.7%)	
Missing	0 (0.0%)	3 (4.8%)	3 (3.4%)	
Influence my or my child(ren)s future de			, ,	0.576
Strongly Disagree	3 (12.0%)	7 (11.1%)	10 (11.4%)	
Disagree	6 (24.0%)	7 (11.1%)	13 (14.8%)	
Neither Agree nor Disagree	7 (28.0%)	24 (38.1%)	31 (35.2%)	
Agree	4 (16.0%)	12 (19.0%)	16 (18.2%)	
Strongly Agree	5 (20.0%)	9 (14.3%)	14 (15.9%)	
Missing	0 (0.0%)	4 (6.3%)	4 (4.5%)	
Inform my family members of their risk		T (0.570)	T (T.370)	0.568
Strongly Disagree	0 (0.0%)	3 (4.8%)	3 (3.4%)	0.308
	1 (4.0%)	4 (6.3%)		
Disagree			5 (5.7%)	
Neither Agree nor Disagree	2 (8.0%)	11 (17.5%)	13 (14.8%)	
Agree	13 (52.0%)	23 (36.5%)	36 (40.9%)	
Strongly Agree	9 (36.0%)	18 (28.6%)	27 (30.7%)	
Missing	0 (0.0%)	4 (6.3%)	4 (4.5%)	0.001
Satisfy my curiosity about my risk for d			2 (2 (2 ()	0.221
Strongly Disagree	0 (0.0%)	3 (4.8%)	3 (3.4%)	
Disagree	2 (8.0%)	6 (9.5%)	8 (9.1%)	
Neither Agree nor Disagree	2 (8.0%)	15 (23.8%)	17 (19.3%)	
Agree	12 (48.0%)	21 (33.3%)	33 (37.5%)	
Strongly Agree	9 (36.0%)	13 (20.6%)	22 (25.0%)	
Missing	0 (0.0%)	5 (7.9%)	5 (5.7%)	
Give me peace of mind about my risk for	or dementia.			0.132
Strongly Disagree	0 (0.0%)	3 (4.8%)	3 (3.4%)	
Disagree	1 (4.0%)	11 (17.5%)	12 (13.6%)	
Neither Agree nor Disagree	4 (16.0%)	15 (23.8%)	19 (21.6%)	
Agree	12 (48.0%)	17 (27.0%)	29 (33.0%)	
Strongly Agree	8 (32.0%)	12 (19.0%)	20 (22.7%)	
Missing	0 (0.0%)	5 (7.9%)	5 (5.7%)	
Let me plan better for the future (for exa				0.419
purchasing long-term care insurance.)	1 /18 80111		,	/
Strongly Disagree	0 (0.0%)	3 (4.8%)	3 (3.4%)	
Disagree	1 (4.0%)	8 (12.7%)	9 (10.2%)	

Neither Agree nor Disagree	3 (12.0%)	10 (15.9%)	13 (14.8%)	
Agree	12 (48.0%)	24 (38.1%)	36 (40.9%)	
Strongly Agree	9 (36.0%)	13 (20.6%)	22 (25.0%)	
Missing	0 (0.0%)	5 (7.9%)	5 (5.7%)	
Influence my end of life planning (for exa	imple, motivate me to	get or change my	Advance	0.946
Directive/Living Will.)				
Strongly Disagree	0 (0.0%)	2 (3.2%)	2 (2.3%)	
Disagree	2 (8.0%)	5 (7.9%)	7 (8.0%)	
Neither Agree nor Disagree	4 (16.0%)	11 (17.5%)	15 (17.0%)	
Agree	9 (36.0%)	23 (36.5%)	32 (36.4%)	
Strongly Agree	10 (40.0%)	18 (28.6%)	28 (31.8%)	
Missing	0 (0.0%)	4 (6.3%)	4 (4.5%)	

Supplementary Table 4. Utility of genetic testing among participants with no cognitive impairment

Supplementary Table 4. Utility of gene	PET Negative	PET Positive	Total
	(N = 15)	(N=4)	(N = 19)
Accurately identify my risk of dementia		(11.1)	(11 2)
Strongly Disagree	0 (0.0%)	0 (0.0%)	0 (0.0%)
Disagree	0 (0.0%)	1 (25.0%)	1 (5.3%)
Neither Agree nor Disagree	4 (26.7%)	0 (0.0%)	4 (21.1%)
Agree	6 (40.0%)	2 (50.0%)	8 (42.1%)
Strongly Agree	5 (33.3%)	1 (25.0%)	6 (31.6%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influence decisions I make about my me		0 (0.070)	0 (0.070)
Strongly Disagree	0 (0.0%)	0 (0.0%)	0 (0.0%)
Disagree	0 (0.0%)	1 (25.0%)	1 (5.3%)
Neither Agree nor Disagree	1 (6.7%)	0 (0.0%)	1 (5.3%)
Agree	8 (53.3%)	2 (50.0%)	10 (52.6%)
Strongly Agree	6 (40.0%)	1 (25.0%)	7 (36.8%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influence my or my child(ren)s future d			0 (0.070)
Strongly Disagree	2 (13.3%)	1 (25.0%)	3 (15.8%)
Disagree Disagree	5 (33.3%)	0 (0.0%)	5 (26.3%)
Neither Agree nor Disagree	2 (13.3%)	2 (50.0%)	4 (21.1%)
Agree	2 (13.3%)	1 (25.0%)	3 (15.8%)
Strongly Agree	4 (26.7%)	0 (0.0%)	4 (21.1%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)
Inform my family members of their risk		0 (0.070)	0 (0.070)
Strongly Disagree	0 (0.0%)	1 (25.0%)	1 (5.3%)
Disagree Disagree	1 (6.7%)	0 (0.0%)	1 (5.3%)
Neither Agree nor Disagree	9 (60.0%)	2 (50.0%)	11 (57.9%)
Agree	5 (33.3%)	1 (25.0%)	6 (31.6%)
Strongly Agree	0 (0.0%)	1 (25.0%)	1 (5.3%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)
Satisfy my curiosity about my risk for d		0 (0.070)	0 (0.070)
Strongly Disagree	0 (0.0%)	1 (25.0%)	1 (5.3%)
Disagree Disagree	1 (6.7%)	0 (0.0%)	1 (5.3%)
Neither Agree nor Disagree	1 (6.7%)	0 (0.0%)	1 (5.3%)
Agree	7 (46.7%)	2 (50.0%)	9 (47.4%)
Strongly Agree	6 (40.0%)	1 (25.0%)	7 (36.8%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)
Give me peace of mind about my risk for		0 (0.070)	0 (0.070)
Strongly Disagree	0 (0.0%)	1 (25.0%)	1 (5.3%)
Disagree Disagree	0 (0.0%)	0 (0.0%)	0 (0.0%)
Neither Agree nor Disagree	2 (13.3%)	0 (0.0%)	2 (10.5%)
Agree	8 (53.3%)	2 (50.0%)	10 (52.6%)
Strongly Agree	5 (33.3%)	1 (25.0%)	6 (31.6%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)
Let me plan better for the future (for ex-			
long-term care insurance.)	ampie, planning for some	one to be my earegiv	or, purchasing
	0 (0 0%)	1 (25 0%)	1 (5.3%)
	` ′		0 (0.0%)
Strongly Disagree Disagree	0 (0.0%) 0 (0.0%)	1 (25.0%) 0 (0.0%)	

Neither Agree nor Disagree	3 (20.0%)	0 (0.0%)	3 (15.8%)
Agree	7 (46.7%)	2 (50.0%)	9 (47.4%)
Strongly Agree	5 (33.3%)	1 (25.0%)	6 (31.6%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influence my end of life planning (for examp	ole, motivate me to g	et or change my Ad	vance
Directive/Living Will.)			
Strongly Disagree	0 (0.0%)	1 (25.0%)	1 (5.3%)
Disagree	1 (6.7%)	0(0.0%)	1 (5.3%)
Neither Agree nor Disagree	4 (26.7%)	0(0.0%)	4 (21.1%)
Agree	5 (33.3%)	2 (50.0%)	7 (36.8%)
Strongly Agree	5 (33.3%)	1 (25.0%)	6 (31.6%)
Missing	0 (0.0%)	0 (0.0%)	0 (0.0%)

Supplementary Table 5. Utility of genetic testing among participants with mild cognitive impairment

	PET Negative	PET Positive	Total
	(N=5)	(N = 34)	(N = 39)
Accurately identify my risk of dementia.			
Strongly Disagree	0 (0.0%)	1 (3.1%)	1 (2.7%)
Disagree	0 (0.0%)	0 (0.0%)	
Neither Agree nor Disagree	0 (0.0%)	11 (34.4%)	11 (29.7%)
Agree	4 (80.0%)	11 (34.4%)	15 (40.5%)
Strongly Agree	1 (20.0%)	9 (28.1%)	10 (27.0%)
Missing	0 (0.0%)	2 (5.9%)	2 (5.1%)
Influence decisions I make about my me			
Strongly Disagree	0 (0.0%)	2 (6.2%)	2 (5.4%)
Disagree	0 (0.0%)	2 (6.2%)	2 (5.4%)
Neither Agree nor Disagree	0 (0.0%)	7 (21.9%)	7 (18.9%)
Agree	4 (80.0%)	13 (40.6%)	17 (45.9%)
Strongly Agree	1 (20.0%)	8 (25.0%)	9 (24.3%)
Missing	0 (0.0%)	2 (5.9%)	2 (5.1%)
Influence my or my child(ren)s future de			
Strongly Disagree	0 (0.0%)	4 (12.9%)	4 (11.1%)
Disagree	0 (0.0%)	3 (9.7%)	3 (8.3%)
Neither Agree nor Disagree	4 (80.0%)	14 (45.2%)	18 (50.0%)
Agree	1 (20.0%)	5 (16.1%)	6 (16.7%)
Strongly Agree	0 (0.0%)	5 (16.1%)	5 (13.9%)
Missing	0 (0.0%)	3 (8.8%)	3 (7.7%)
Inform my family members of their risk			
Strongly Disagree	0 (0.0%)	2 (6.5%)	2 (5.6%)
Disagree	0 (0.0%)	1 (3.2%)	1 (2.8%)
Neither Agree nor Disagree	2 (40.0%)	8 (25.8%)	10 (27.8%)
Agree	1 (20.0%)	10 (32.3%)	11 (30.6%)
Strongly Agree	2 (40.0%)	10 (32.3%)	12 (33.3%)
Missing	0 (0.0%)	3 (8.8%)	3 (7.7%)
Satisfy my curiosity about my risk for de			
Strongly Disagree	0 (0.0%)	2 (6.7%)	2 (5.7%)
Disagree	0 (0.0%)	1 (3.3%)	1 (2.9%)
Neither Agree nor Disagree	1 (20.0%)	9 (30.0%)	10 (28.6%)
Agree	3 (60.0%)	10 (33.3%)	13 (37.1%)
Strongly Agree	1 (20.0%)	8 (26.7%)	9 (25.7%)
Missing	0 (0.0%)	4 (11.8%)	4 (10.3%)
Give me peace of mind about my risk fo		1 (2 22 ()	1 (2 00 ()
Strongly Disagree	0 (0.0%)	1 (3.2%)	1 (2.8%)
Disagree	0 (0.0%)	6 (19.4%)	6 (16.7%)
Neither Agree nor Disagree	2 (40.0%)	9 (29.0%)	11 (30.6%)
Agree	2 (40.0%)	8 (25.8%)	10 (27.8%)
Strongly Agree	1 (20.0%)	7 (22.6%)	8 (22.2%)
Missing	0 (0.0%)	3 (8.8%)	3 (7.7%)
Let me plan better for the future (for exa	mple, planning for someon	ne to be my caregive	r, purchasing
long-term care insurance.)	0 (0 00()	1 (2 20/)	1 (2 00()
Strongly Disagree	0 (0.0%)	1 (3.3%)	1 (2.9%)

Disagree	0 (0.0%)	4 (13.3%)	4 (11.4%)		
Neither Agree nor Disagree	0 (0.0%)	7 (23.3%)	7 (20.0%)		
Agree	4 (80.0%)	11 (36.7%)	15 (42.9%)		
Strongly Agree	1 (20.0%)	7 (23.3%)	8 (22.9%)		
Missing	0 (0.0%)	4 (11.8%)	4 (10.3%)		
Influence my end of life planning (for example, motivate me to get or change my Advance					
Directive/Living Will.)					
Strongly Disagree	0 (0.0%)	1 (3.1%)	1 (2.7%)		
Disagree	0 (0.0%)	3 (9.4%)	3 (8.1%)		
Neither Agree nor Disagree	0 (0.0%)	8 (25.0%)	8 (21.6%)		
Agree	3 (60.0%)	10 (31.2%)	13 (35.1%)		
Strongly Agree	2 (40.0%)	10 (31.2%)	12 (32.4%)		
Missing	0 (0.0%)	2 (5.9%)	2 (5.1%)		