* Risk factors or causes of frailty among CKD patients.

		Effect (descriptions)		Prevalence	CKD Severity	Frailty Assessment	Sample Size	Reference
Biological								
	Cardiovascular	Heart Failure		30% vs 12%	CKD stages 1-4	Fried Phenotypes	336	[3]
		Angina		34% vs. 22%	CKD stages 1-4	Fried Phenotypes	336	[3]
	Cerebrovascular	Cerebrovascular Disease Prevalence (%)		26.4 vs. 12.0	ESRD	Fried Phenotypes	324	[5]
	Neurological	Brain Wave		F vs. NF	ESRD, under chronic dialysis	Simple FRAIL scale (SFS)	46	[6]
			Global DAR	283 ± 679 vs. 2971 ± 4859				
			DARs (left frontal)	135 ± 250 vs. 3073 ± 4702				
			DAR (left TO)	197 ± 318 vs. 3708 ± 6398				
			DAR (central)	55 ± 96 vs. 1773 ± 3262				
			DAR (right TO)	187 ± 261 vs. 4400 ± 7763				
			Global DTABR	191 ± 469 vs. 1781 ± 2793				
			DTABR (left frontal)	86 ± 158 vs. 1680 ± 2388				
			DTABR (left TO)	130 ± 210 vs. 1884 ± 2828				
			DTABR (central)	39 ± 65 vs. 1132 ± 1957				
			DTABR (right TO)	126 ± 178 vs. 2960 ± 5271				
	Cognitive	Mini-Mental State Examination			Elderly, ≥65y/o	Edmonton	137	[7]

		(MMSE)			Frail Scale (EFS)		
		Spearman's correlation coefficient of EFS scores with gross MMSE scores	-0.607 ($p<0.01$)				
		Executive Function	F vs. NF at cohort entry				
		Trail Making Tests A (TMTA) scores	+12.08	ESRD	Fried Phenotypes	324	[5]
		Trail Making Tests B (TMTB) scores	+33.15	ESRD	Fried Phenotypes	324	[5]
	Microbiota	Gut Microbiota Composition		Stage 3b-4, eGFR 15-45ml/min	Fried Phenotype score	64 (and 15 control subjects)	[10]
		Malnutrition-Inflammation-Score (MIS)	7.6 vs. 3.9				
		Abundance of unclassified Mogibacteriaceae and Oscillospira	Directly proportional to MIS				
		Abundance of Akkermansia, Ruminococcus, and Eubacterium	Inversely proportional to MIS				
		Bacterial Abundance of some genera (Mogibacteriacee,	↑				

			Coriobacteriacee, Eggerthella, Erwinia, Coprobacillus, Anaerotruncus, etc)					
	Immunological	Mycophenolate mofetil (MMF) dose reduction (MDR)		F vs. NF	CKD stage 5T	Fried Phenotypes	525	[9]
			1 year since KT (%)	44 vs 40				
			2 years since KT (%)	54 vs. 45				
			3 years since KT (%)	67 vs. 51				
		Viral infection		F vs. NF				
			HCV (n=37)	36 vs. 1	CKD stage 5D (hemodialysis)	Fried Phenotypes	205	[1]
	Functional Status	Disability		F vs. NF	CKD stages 1-4	Fried Phenotypes	336	[3]
			At least one disability in activities of daily Living (ADLs)	15% vs. 5%				
			At least one disability in instrumental activities of daily living (IADLs)	60% vs. 28%				
			At least one disability in mobility tasks	40% vs. 18%				
	Endocrinologic/	Diabetes		F vs. NF				

	Metabolic		Prevalence	64% vs. 49%	CKD stages 1-4	Fried Phenotypes	336	[3]
		Obesity		F vs. NF				
			Prevalence	64% vs. 50%	CKD stages 1-4	Fried Phenotypes	336	[3]
			Prevalence	51.8% vs. 23.9%	ESRD	Fried Phenotypes	324	[5]
			BMI based on dry weight	31.5 vs. 27.6				
	Body Composition	Appendicular skeletal muscle mass index (ASMI)		6.8 vs. 7.7	CKD stage 1-5	Edmonton Frail Scale (EFS)	41	[11]
		Low lean body mass (i.e. sarcopenia) (in frail vs. nonfrail)		57.1% vs .14.7%				
	Laboratory Data	eGFR (mL/min/1.72m^2)		18 vs. 50	CKD stage 1-5	Edmonton Frail Scale (EFS)	41	[11]
			eGFRcys <30	Frailty prevalence 2.8	CKD stages 1-4	Fried Phenotypes	336	[3]*
			eGFRcys 30-44	Frailty prevalence 2.1				
			eGFRcys >60	Referent				
		Albumin (g/L)		38 vs. 41	CKD stage 1-5	Edmonton	41	[11]

		Calcium (mmol/L)	2.24 vs. 2.36		Frail Scale (EFS)		
		Creatinine (umol/L)	299 vs. 115				
	Miscellaneous	Dialysis clearance rate	↑	ESRD, under chronic dialysis	Simple FRAIL scale (SFS)	46	[6]
Psychological							
	Mood	Mood Change	Negative change	CKD stage 5D (hemodialysis)	Edmonton Frail Scale (EFS)	N/A	[13]
	Mental Health						
		Anxiety	Hospital Anxiety and Depression Scale (HADS)	Women: ↑ in global, psychological, social frailty Men: ↑ in Physical frailty	ESRD, under online-haemodiafiltration (OL-HDF)	N/A	97	[14]
		Depression	Hospital Anxiety and Depression Scale (HADS)	Men ↑ in global, psychological, physical frailty	ESRD, under online-haemodiafiltration (OL-HDF)	N/A	97	[14]
			Incidence (%) (Self-reported Major Depression Inventory)	83 vs. 6	CKD stage 1-5	Edmonton Frail Scale (EFS)	41	[11]
	Mental Function	Post-KT delirium	9.0% vs. 3.9%	CKD stage 5T	Fried	893	[15]

					Phenotypes		
Sociological							
Isolation							
Interaction	Interaction with family		Good				[16]
Quality of Life	HRQoL						
	SF-36						
		Scores in physical functioning, blood pressure, role physical, and physical component summary domains	↓	CKD stage 1-5	Edmonton Frail Scale (EFS)	41	[11]
	Falls (times)		115 vs. 12	CKD stage 5D (hemodialysis)	Fried Frailty Phenotypes	205	[1]
Independence	Functional Independence Measure (FIM)			Elderly, ≥65y/o	Edmonton Frail Scale (EFS)	137	[7]
	Spearman's correlation coefficient	Frailty diagnosis with global FIM	-0.703 ($p<0.001$)				
		Frailty diagnosis with motor FIM	-0.714 ($p<0.001$)				
		Frailty diagnosis with cognitive FIM	-0.575 ($p<0.001$)				

		EFS scores with gross FIM	-0.53 ($p<0.01$)				
Health-care utilization	Hospitalization						
		Cumulative number of inpatient health-care visits	↑	CKD stage 1-5	Edmonton Frail Scale (EFS)	41	[11]
		Cumulative number of emergency health-care visits					
		Cumulative number of total health-care visits					
		>3 times (n=141)	127 vs. 14	CKD stage 5D (hemodialysis)	Fried Frailty Phenotypes	205	[1]
		1-2 times (n=64)	40 vs. 24				

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