

Table S1. Databases and search strategies used in present systematic review.

Database	Coverage	Search run	Records
MEDLINE	1946 to present	“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis)”	311
		“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis) AND (renal decline OR disease severity OR progression OR mortality OR major adverse cardiovascular events OR inflammation OR inflammatory response) AND (probiotic OR prebiotic OR symbiotic)”	52
		“(“Gastrointestinal Microbiome”[Mesh]) AND “Renal Insufficiency, Chronic”[Mesh]”	312
			Total records = 675
Embase	1966 to present	“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis)”	511
		“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR hemodialysis) AND (renal decline OR disease severity OR progression OR mortality OR major adverse cardiovascular events OR inflammation OR inflammatory response) AND (probiotic OR prebiotic OR symbiotic)”	16
		“(microbiota OR microbiome OR microflora) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis)”	199
			Total records = 726
Cochrane library	1967 to present	“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis)”	52
		“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR hemodialysis) AND (renal decline OR disease severity OR progression OR mortality OR major adverse cardiovascular events OR inflammation OR inflammatory response) AND (probiotic OR prebiotic OR symbiotic)”	16
		“(microbiota OR microbiome OR microflora) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis)”	187
			Total records = 255
Scopus	From the inception till present	“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis)”	348

“(microbiota OR microbiome OR microflora) AND (gut OR intestinal OR gastrointestinal) AND (composition OR diversity) AND (chronic kidney disease OR end-stage kidney disease OR hemodialysis) AND (renal decline OR disease severity OR progression OR mortality OR major adverse cardiovascular events OR inflammation OR inflammatory response) AND (probiotic OR prebiotic OR symbiotic)”	0
“(microbiota OR microbiome OR microflora) AND (chronic kidney disease OR end-stage kidney disease OR haemodialysis)”	1281
Total records = 1629	
All databases: 3285 records	