## Supplemental material

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Number	Symptom
1	constipation
2	nausea
3	vomiting
4	diarrhoea
5	decreased appetite
6	muscle cramps
7	leg swelling
8	shortness of breath
9	dizziness
10	restless legs
11	tingling in feet
12	fatigue
13	cough
14	dry mouth
15	bone or joint pain
16	chest pain
17	headache
18	muscle soreness
19	difficulty concentrating
20	dry skin
21	itch
22	worrying
23	feeling nervous
24	trouble falling asleep
25	trouble staying asleep
26	feeling irritable
27	feeling sad
28	feeling anxious
29	decreased interest in sex
30	difficulty becoming sexually aroused

Supplemental Table 1. Dialysis symptom index (DSI) symptom list.

**Supplemental Table 2.** The 30 symptoms from the Dialysis Symptom Index (DSI) according nine symptom systems.

Symptom system	Symptoms included from DSI questionnaire
1. General	- Fatigue
2. Cardiopulmonary	<ul> <li>Leg swelling</li> <li>Shortness of breath</li> <li>Cough</li> <li>Chest pain</li> </ul>
3. Sexual	<ul> <li>Decreased interest in sex</li> <li>Difficulty becoming sexually aroused</li> </ul>
4. Integumentary	- Dry skin - Dry mouth - Itch
5. Sleep disorders	<ul> <li>Trouble staying asleep</li> <li>Trouble falling asleep</li> </ul>
6. Musculoskeletal	- Muscle cramps - Muscle soreness - Bone or joint pain
7. Emotional	- Worrying - Feeling irritable - Feeling sad - Feeling nervous - Feeling anxious
8. Gastrointestinal	<ul> <li>Decreased appetite</li> <li>Nausea</li> <li>Constipation</li> <li>Diarrhoea</li> <li>Vomiting</li> </ul>
9. Neurological	<ul> <li>Difficulty concentrating</li> <li>Restless legs</li> <li>Headache</li> <li>Dizziness</li> <li>Tingling in feet</li> </ul>

**Supplemental Table 3.** Description of the methods and results of the conducted subgroup analyses.

## Subgroup analyses

Methods	To identify differences in outcome within subgroups we studied the linear change of symptom burden before and after dialysis initiation, after stratification at baseline for age ( $\geq$ 65 to <75 vs $\geq$ 75 years), sex (men vs women), smoking status (never, ex or current smoker), history of diabetes (yes/no), history of cardiovascular disease defined as cerebrovascular disease, myocardial infarction or peripheral vascular disease (yes/no), Charlson comorbidity index (<7 or $\geq$ 7), eGFR decline per year (<5 vs $\geq$ 5 ml/min/1.73m <sup>2</sup> ), eGFR at start of dialysis (<10 vs $\geq$ 10 ml/min/1.73m <sup>2</sup> ) and dialysis modality (hemodialysis vs peritoneal dialysis). Within these subgroups, we adjusted for the potential confounders age, sex, smoking, history of diabetes, history of cardiovascular disease, eGFR at start of dialysis modality when appropriate.
Results	In all subgroup analyses, symptom number and burden increased in the year before dialysis initiation and stabilized or somewhat declined in the year after, in line with the main results.[Supplemental Table 6 and 7] In men compared to women, symptom number and burden decreased less in the year after start of dialysis. In current smokers compared to former or never smokers, symptom number and burden decreased less in the year after start of dialysis. In current smokers compared to former or never smokers, symptom number and burden decreased less in the year after dialysis initiation compared to patients ≥65 and <75 years. Symptom number and burden increased more before start of dialysis and declined more after dialysis initiation

confounders did not alter these results.

in those with a lower eGFR at start of dialysis. Symptom burden declined faster in the year after dialysis initiation in those with a rapid annual eGFR decline compared to those with a slower annual eGFR decline, in hemodialysis compared to peritoneal dialysis patients, in patients with a lower Charlson comorbidity index and those without a history of diabetes. No clinically relevant differences in evolution of symptom number and burden were observed in groups stratified by history of cardiovascular disease. Adjustment for relevant **Supplemental Table 4.** Evolution of symptom number and burden in the year before and after start of dialysis within subgroups, adjusted for potential confounders.

Subgroup analyses*				
[adjusted for]	Symptom number		Symptom	burden
	Year before dialysis	Year after dialysis	Year before dialysis	Year after dialysis
All 456 dialysis patients (crude)	+3.6 (+2.5 to +4.6)	-0.9 (-3.4 to +1.5)	+13.3 (+9.5 to +17.0)	-5.9 (-14.9 to -3.0)
Age				
[crude]				
≥65 - <75 years, <i>n</i> = 225	+3.4 (+1.9 to +5.0)	-1.5 (-5.0 to +1.9)	+11.6 (+6.1 to +17.2)	-7.6 (-20.4 to +5.3)
≥75 years, <i>n</i> = 231	+3.8 (+2.3 to +5.2)	-0.1 (-3.7 to +3.4)	+15.1 (+10.0 to +20.2)	-3.8 (-16.4 to +8.8)
[sex]				
≥65 - <75 years	+3.4 (+1.9 to +5.0)	-1.5 (-5.0 to +2.0)	+11.7 (+6.2 to +17.3)	-7.4 (-20.2 to +5.4)
≥75 years	+3.7 (+2.3 to +5.2)	-0.1 (-3.7 to +3.4)	+15.1 (+9.9 to +20.2)	-3.8 (-16.4 to +8.8)
Sex				
[crude]				
male <i>, n</i> = 343	+3.7 (+2.5 to +4.8)	-0.7 (-3.4 to +2.1)	+13.7 (+9.6 to +17.8)	-4.6 (-14.4 to +5.2)
female, <i>n</i> = 113	+3.2 (+0.8 to +5.5)	-1.8 (-7.3 to +3.6)	+11.9 (+3.1 to +20.7)	-11.0 (-31.9 to +9.9)
eGFR (CKD-EPI) decline per year				
[crude]				
≥5 ml/min/1.73m², <i>n</i> = 120	+4.7 (+2.7 to +6.6)	-1.1 (-5.7 to +3.6)	+16.0 (+9.3 to +22.8)	-9.1 (-25.2 to +7.0)
<5 ml/min/1.73m <sup>2</sup> , <i>n</i> = 145	+3.4 (+1.8 to +5.0)	-0.6 (-4.7 to +3.4)	+11.0 (+5.1 to +16.9)	-2.5 (-17.5 to +12.4)
[age + sex]				
≥5 ml/min/1.73m <sup>2</sup>	+4.7 (+2.7 to +6.6)	-1.1 (-5.7 to +3.5)	+16.0 (+9.3 to +22.7)	-9.2 (-25.3 to +6.9)
<5 ml/min/1.73m <sup>2</sup>	+3.4 (+1.8 to +5.0)	-0.6 (-4.7 to +3.4)	+11.1 (+5.2 to +17.0)	-2.6 (-17.5 to +12.3)
[age + sex + smoking + CVD + DM]				
≥5 ml/min/1.73m <sup>2</sup>	+4.6 (+2.7 to +6.6)	-1.1 (-5.8 to +3.6)	+16.1 (+9.3 to +23.0)	-9.7 (-26.2 to +6.8)
<5 ml/min/1.73m <sup>2</sup>	+3.1 (+1.5 to +4.8)	-0.5 (-4.7 to +3.6)	+10.6 (+4.6 to +16.6)	-2.1 (-17.2 to +12.9)
eGFR (CKD-EPI) at start of dialysis				
[crude]				
≥10 ml/min/1.73m², <i>n</i> = 50	-0.1 (-3.7 to +3.5)	+0.1 (-8.6 to +8.7)	-1.1 (-13.4 to +11.3)	-3.8 (-34.0 to +26.3)
<10 ml/min/1.73m <sup>2</sup> , <i>n</i> = 348	+4.2 (+3.1 to +5.4)	-1.1 (-3.8 to +1.6)	+15.4 (+11.2 to +19.5)	-6.4 (-16.4 to +3.6)
[age + sex]				
≥10 ml/min/1.73m <sup>2</sup>	+0.1 (-3.4 to +3.7)	+0.2 (-8.4 to +8.8)	-0.3 (-12.6 to +12.1)	-3.5 (-33.5 to +26.5)
<10 ml/min/1.73m <sup>2</sup>	+4.2 (+3.1 to +5.3)	-1.1 (-3.8 to +1.6)	+15.3 (+11.2 to +19.5)	-6.4 (-16.4 to +3.5)
[age + sex + smoking + CVD + DM]				
≥10 ml/min/1.73m <sup>2</sup>	-0.8 (-4.5 to +2.8)	+0.8 (-8.3 to +9.9)	-4.2 (-16.5 to +8.1)	-1.9 (-32.8 to +29.0)

<10 ml/min/1.73m <sup>2</sup>	+4.0 (+2.8 to +5.2)	-1.0 (-3.8 to +1.8)	+14.8 (+10.6 to +19.1)	-6.4 (-16.6 to +3.8)
Smoking status				
[crude]				
never smoker, <i>n</i> = 139	+4.1 (+2.0 to +6.2)	-0.2 (-5.2 to +4.8)	+13.1 (+5.5 to +20.6)	-2.5 (-20.5 to +15.5)
ex smoker, <i>n</i> = 233	+2.6 (+1.2 to +4.1)	-0.9 (-4.3 to +2.5)	+12.0 (+6.7 to +17.2)	-6.5 (-18.9 to +5.8)
current smoker, $n = 41$	+6.0 (+3.1 to +8.9)	-1.9 (-9.3 to +5.6)	+19.6 (+8.1 to +31.1)	-8.2 (-37.1 to +20.8)
[age + sex ]				
never smoker	+4.0 (+1.9 to +6.1)	-0.2 (-5.2 to +4.7)	+12.9 (+5.4 to +20.5)	-2.6 (-20.6 to +15.3)
ex smoker	+2.7 (+1.2 to +4.1)	-0.9 (-4.3 to +2.5)	+12.0 (+6.8 to +17.2)	-6.5 (-18.9 to +5.8)
current smoker	+6.1 (+3.2 to +9.0)	-1.8 (-9.2 to +5.7)	+20.0 (+8.5 to +31.6)	-7.8 (-36.9 to +21.3)
[age + sex + DM]				
never smoker	+4.0 (+1.9 to +6.1)	-0.3 (-5.2 to +4.7)	+13.0 (+5.4 to +20.5)	-2.7 (-20.6 to +15.3)
ex smoker	+2.6 (+1.2 to +4.1)	-0.8 (-4.3 to +2.6)	+12.0 (+6.7 to +17.2)	-6.7 (-19.2 to +5.8)
current smoker	+6.1 (+3.1 to +8.9)	-1.9 (-9.4 to +5.5)	+20.0 (+8.5 to +31.5)	-8.8 (-37.6 to +19.9)
History of diabetes				
[crude]				
yes, <i>n</i> = 199	+3.3 (+1.6 to +5.0)	-0.4 (-4.4 to +3.6)	+15.7 (+9.5 to +21.8)	-3.4 (-17.7 to +11.0)
no, <i>n</i> = 248	+3.8 (+2.5 to +5.1)	-1.4 (-4.5 to +1.8)	+11.6 (+6.9 to +16.4)	-8.3 (-19.8 to +3.2)
[age + sex]				
yes	+3.3 (+1.6 to +5.0)	-0.4 (-4.4 to +3.6)	+15.7 (+9.5 to +21.8)	-3.2 (-17.6 to +11.1)
no	+3.8 (+2.5 to +5.1)	-1.4 (-4.5 to +1.8)	+11.6 (+6.8 to +16.3)	-8.3 (-19.9 to +3.2)
[age + sex + smoking]				
yes	+3.0 (+1.3 to +4.8)	-0.4 (-4.4 to +3.6)	+15.2 (+8.9 to +21.4)	-3.5 (-18.0 to +11.1)
no	+3.6 (+2.3 to +5.0)	-1.2 (-4.4 to +2.0)	+11.5 (+6.7 to +16.3)	-8.2 (-20.0 to +3.6)
listom, of condinuouslay				
History of cardiovascular disease**				
[crude]				
yes, <i>n</i> = 200	+3.6 (+2.2 to +5.1)	-1.1 (-4.6 to +2.4)	+13.9 (+8.2 to +19.5)	-5.1 (-18.7 to +8.5)
no, <i>n</i> = 236	+3.5 (+2.0 to +5.0)	-0.7 (-4.2 to +2.9)	+12.1 (+6.9 to +17.2)	-6.2 (-18.4 to +6.0)
[age + sex]	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	, , ,	, , , , , , , , , , , , , , , , , , ,
yes	+3.6 (+2.1 to +5.1)	-1.1 (-4.6 to +2.4)	+13.9 (+8.2 to +19.5)	-5.1 (-18.7 to +8.5)
no	+3.4 (+1.9 to +4.9)	-0.7 (-4.2 to +2.9)	+11.8 (+6.7 to +16.9)	-6.3 (-18.5 to +6.0)
[age + sex + smoking + DM]				
yes	+3.3 (+1.8 to +4.8)	-1.0 (-4.5 to +2.6)	+13.3 (+7.5 to +19.0)	-5.4 (-19.3 to +8.6)
no	+3.4 (+1.8 to +4.9)	-0.7 (-4.3 to +2.9)	+11.8 (+6.6 to +17.0)	-6.2 (-18.6 to +6.2)
Charlson comorbidity index				
[crude]				
<7, <i>n</i> = 216	+3.8 (+2.4 to +5.3)	-1.4 (-4.9 to +2.2)	+13.4 (+8.2 to +18.6)	-7.9 (-20.4 to +4.6)
≥7, <i>n</i> = 231	+3.3 (+1.9 to +4.8)	-0.4 (-3.9 to +3.0)	+13.2 (+7.7 to +18.7)	-3.5 (-16.6 to +9.5)
[age + sex]				

<7	+3.8 (+2.3 to +5.3)	-1.3 (-4.9 to +2.2)	+13.4 (+8.2 to +18.6)	-7.8 (-20.3 to +4.6)
≥7	+3.3 (+1.8 to +4.7)	-0.5 (-3.9 to +3.0)	+13.0 (+7.5 to +18.5)	-3.7 (-16.7 to +9.4)
[age + sex + smoking]				
<7	+3.8 (+2.3 to +5.3)	-1.2 (-4.8 to +2.4)	+13.3 (+8.1 to +18.5)	-7.6 (-20.2 to +5.0)
≥7	+2.9 (+1.4 to +4.4)	-0.5 (-4.0 to +3.0)	+12.4 (+6.8 to +18.0)	-4.1 (-17.5 to +9.2)
Dialysis modality				
[crude]				
hemodialysis, <i>n</i> = 325	+3.2 (+1.9 to +4.5)	-1.0 (-4.0 to +2.1)	+12.3 (+7.4 to +17.3)	-6.7 (-18.2 to +4.8)
peritoneal dialysis, <i>n</i> = 99	+4.6 (+2.8 to +6.4)	-1.0 (-5.5 to +3.5)	+15.7 (+9.7 to +21.7)	-3.9 (-18.9 to +11.2)
[age + sex]				
hemodialysis	+3.2 (+1.9 to +4.5)	-1.0 (-4.0 to +2.1)	+12.3 (+7.3 to +17.2)	-6.6 (-18.1 to +4.9)
peritoneal dialysis	+4.6 (+2.8 to +6.4)	-1.0 (-5.5 to +3.6)	+15.7 (+9.6 to +21.7)	-3.7 (-18.8 to +11.4)
[age + sex + smoking + DM + CVD]				
hemodialysis	+2.9 (+1.5 to +4.2)	-0.8 (-4.0 to +2.3)	+11.2 (+6.1 to +16.3)	-6.4 (-18.3 to +5.5)
peritoneal dialysis	+4.7 (+2.8 to +6.5)	-0.7 (-5.4 to +4.0)	+15.9 (+9.7 to +22.0)	-3.5 (-19.1 to +12.1)

\*Subgroup status determined at start of dialysis

\*\*Defined as a history of cerebrovascular disease, myocardial infarction or peripheral vascular disease

**Supplemental Table 5.** Median (IQR) symptom number and burden scores at start of dialysis or within 30 days before start of dialysis per subgroup in those who filled a DSI at that time.

Subgroup	Median number (IQR)	Median burden (IQR)
Total with DSI available, <i>n</i> = 198*	16 (10-20)	48 (28-63)
Age		
≥65 - <75 years, <i>n</i> = 85	16 (10-20)	46 (24-62)
≥75 years, <i>n</i> = 113	15 (11-21)	51 (36-65)
Sex		
men <i>, n</i> = 156	15 (10-20)	48 (27-63)
women, <i>n</i> = 42	17 (15-21)	51 (46-63)
eGFR (CKD-EPI)		
≥10 ml/min/1.73m², <i>n</i> = 106	16 (10-20)	48 (26-63)
<10 ml/min/1.73m <sup>2</sup> , <i>n</i> = 82	15 (11-20)	48 (35-64)
Smoking status		
never smoker, <i>n</i> = 57	18 (9-22)	57 (30-70)
ex smoker, <i>n</i> = 101	15 (10-20)	46 (27-62)
current smoker, <i>n</i> = 21	17 (13-23)	54 (45-69)
History of diabetes		
yes, <i>n</i> = 88	16 (10-20)	50 (23-65)
no, <i>n</i> = 106	15 (10-20)	48 (33-63)
History of cardiovascular disease**		
yes, <i>n</i> = 87	16 (12-20)	51 (36-63)
no, <i>n</i> = 104	15 (10-21)	46 (26-64)
Charlson comorbidity index		
<7, n = 97	15 (9-20)	46 (21-61)
≥7, <i>n</i> = 97	16 (13-20)	54 (41-67)
Dialysis modality		
hemodialysis, n = 139	16 (11-21)	51 (30-65)
peritoneal dialysis, <i>n</i> = 53	16 (11-20)	48 (36-61)

Symptoms at or within 30 days before start of dialysis

\*Since not all patients completed a DSI questionnaire at start of dialysis or within 30 days before start of dialysis, this information was only available for 198 (44%) of the 456 included patients. \*\*Defined as a history of cerebrovascular disease, myocardial infarction or peripheral vascular disease.

	Included	Excluded
	<i>n</i> = 456	<i>n</i> = 134
Demographics		
Age (yr)	76 (6)	75 (6)
Men, <i>n</i> (%)	343 (75)	92 (69)
Ethnicity, n (%)		
White	440 (96)	116 (87)
Black	4 (1)	2 (2)
Asian	5 (1)	12 (9)
Other / unknown	7 (2)	3 (2)
Clinical characteristics		
Primary kidney disease, n (%)		
Diabetes	110 (24)	36 (27)
Hypertension	124 (28)	37 (28)
Systemic / glomerular / tubulointerstitial	116 (26)	18 (14)
Other / unknown	106 (23)	40 (30)
Dialysis modality, <i>n</i> (%)		
Hemodialysis	325 (77)	75 (74)
Peritoneal dialysis	99 (23)	26 (26)
Charlson comorbidity index	6.9 (1.9)	6.8 (1.8)
History of diabetes, n (%)	199 (44)	65 (51)
History of cardiovascular disease, n (%) <sup>a</sup>	200 (46)	53 (42)
History of chronic lung disease, <i>n</i> (%)	53 (12)	21 (16)
History of malignancy, <i>n</i> (%)	95 (22)	21 (17)
BMI (kg/m²) <sup>b</sup>	28 (6)	27 (3)
Systolic BP (mmHg) <sup>b</sup>	147 (22)	147 (24)
Diastolic BP (mmHg) <sup>b</sup>	75 (11)	74 (12)
Blood chemistry <sup>b</sup>	<b>、</b> ,	
Creatinine (mg/dL) <sup>c</sup>	6.6 (2.3)	6.3 (2.1)
eGFR (ml/min/1.73m <sup>2</sup> ) <sup>d</sup>	8 (3)	8 (3)
Urea nitrogen (mg/dL) <sup>e</sup>	92 (42)	109 (73)
Albumin (g/dL) (mean (SD))	3.5 (0.6)	3.5 (0.8)
Cholesterol (mg/dL) (mean (SD)) <sup>f</sup>	159 (54)	143 (35)

**Supplemental Table 6.** Characteristics of 590 patients in the European Quality (EQUAL) study on treatment of older people with advanced chronic kidney disease at start of dialysis.

Data are expressed as number (%) or mean (± standard deviation)

<sup>a</sup>Cardiovascular disease was defined as any history of a cerebral vascular accident,

a myocardial infarction or peripheral vascular disease

<sup>b</sup>Measured at start of dialysis or within 30 days before start of dialysis

<sup>c</sup>To convert the values for creatinine to micromoles per liter, multiply by 88.40

<sup>d</sup>eGFR, was estimated based on serum creatinine using the CKD-EPI formula

<sup>e</sup>To convert the values for urea nitrogen to millimoles per liter, multiply by 0.3571

<sup>f</sup>To convert the values for cholesterol to millimoles per liter, multiply by 0.02586

**Supplemental Table 7.** The number (%) of patients who did or did not have a study visit of all included patients (n = 456) within each follow-up interval.

Follow-up interval in months*	-12 to -9	-9 to -6	-6 to -3	-3 to 0	0 to +3	+3 to +6	+6 to +9	+9 to +12
Study visit, n (%)	184 (40)	195 (43)	237 (52)	331 (73)	374 (82)	234 (51)	156 (34)	179 (39)
DSI completed	160 (87)	170 (87)	186 (79)	255 (77)	237 (63)	158 (68)	97 (62)	120 (67)
DSI missing	24 (13)	25 (13)	51 (21)	76 (23)	137 (37)	76 (32)	59 (38)	59 (33)
No study visit, <i>n</i> (%)**	272 (60)	261 (57)	219 (48)	125 (27)	82 (18)	222 (49)	300 (66)	277 (61)
Started during later interval	147 (54)	100 (38)	61 (28)	2 (1)	-	-	-	-
Previous visit <6 months ago	125 (46)	159 (61)	156 (71)	122 (98)	80 (98)	216 (97)	282 (94)	176 (64)
Did not yet reach interval	-	-	-	-	-	0 (0)	0 (0)	2 (1)
Died before scheduled visit	-	-	-	-	-	0 (0)	2 (1)	33 (12)
Stopped before scheduled visit	-	-	-	-	-	0 (0)	1 (0)	26 (9)
Unexplained missing visit	0 (0)	2 (1)	2 (1)	1 (1)	2 (2)	6 (3)	15 (5)	40 (14)

\* Month 0 = start of dialysis

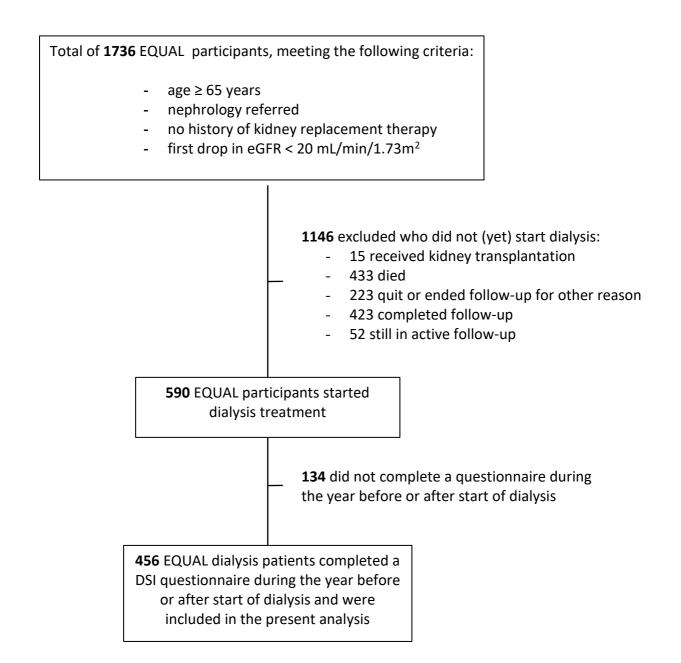
\*\* For those who did not have a study visit, the reason for missing this visit is given: 1) the patient only started the EQUAL study at a later follow-up interval within the year before dialysis initiation; 2) the patient already had a visit during the 6 months before this follow-up interval, thus a new visit was not yet necessary; 3) the patient did not yet reach the corresponding follow-up interval after dialysis initiation at time of the data extraction; 4) the patient died before reaching the corresponding follow-up interval, 5) the patient stopped the study for other reasons before reaching the corresponding follow-up interval, 6) it was unclear why the patient had no study visit within the corresponding follow-up interval. Since these categories are mutually exclusive, the number of patients who died before a scheduled visit in this table (n = 33) differs from the total number of deaths (n = 74) observed in the year after dialysis. Of all patients who died, 41 (55%) had a previous visit <6 months ago before the last follow-up interval and were thus reported in the second category.

DSI: Dialysis Symptom Index

**Supplemental Table 8.** Evolution of burden of 30 kidney disease-related symptoms in the year before and after start of dialysis in 456 older patients, ordered by their nine corresponding symptom systems.

Symptom	Symptom burden (scale 0 to 5)			
	Year before dialysis	Year after dialysis		
Constitutional				
Fatigue	+0.5 (+0.2 to +0.8)	-0.3 (-1.0 to +0.4)		
Cardiopulmonary				
Leg swelling	+0.1 (-0.2 to +0.4)	-1.1 (-1.8 to -0.4)		
Shortness of breath	+0.0 (-0.3 to + 0.3)	-0.7 (-1.4 to +0.0)		
Chest pain	+0.2 (-0.0 to +0.3)	-0.2 (-0.6 to +0.3)		
Cough	+0.2 (-0.1 to +0.4)	+0.2 (-0.5 to +0.8)		
Sexual				
Decreased interest in sex	+0.4 (+0.1 to +0.7)	-0.1 (-0.9 to +0.7)		
Difficulty becoming sexually aroused	+0.4 (+0.0 to +0.7)	-0.1 (-0.9 to +0.7)		
Integumentary				
Itch	+0.4 (+0.2 to +0.7)	-0.1 (-0.8 to +0.5)		
Dry skin	+0.3 (+0.0 to +0.6)	+0.1 (-0.6 to +0.7)		
Dry mouth	+0.3 (+0.0 to +0.5)	-0.2 (-0.9 to +0.4)		
Sleep disorders				
Trouble staying asleep	+0.6 (+0.3 to +0.9)	-0.2 (-0.9 to +0.6)		
Trouble falling asleep	+0.3 (+0.0 to +0.6)	-0.3 (-1.0 to +0.4)		
Musculoskeletal				
Muscle cramps	+0.2 (-0.1 to +0.5)	+0.1 (-0.6 to +0.8)		
Muscle soreness	+0.2 (-0.1 to +0.4)	+0.2 (-0.4 to +0.8)		
Bone or joint pain	+0.3 (+0.0 to +0.6)	+0.1 (-0.6 to +0.9)		
Emotional				
Worrying	+0.6 (+0.3 to +0.9)	-0.5 (-1.2 to +0.2)		
Feeling irritable	+0.5 (+0.3 to +0.7)	+0.0 (-0.6 to +0.6)		
Feeling sad	+0.5 (+0.2 to +0.7)	-0.2 (-0.8 to +0.4)		
Feeling nervous	+0.3 (+0.1 to +0.6)	-0.2 (-0.8 to +0.4)		
Feeling anxious	+0.2 (-0.1 to +0.4)	-0.2 (-0.8 to +0.5)		
Gastrointestinal				
Decreased appetite	+0.8 (+0.5 to +0.3)	-0.4 (-1.1 to +0.3)		
Nausea	+0.5 (+0.2 to +0.7)	-0.5 (-1.1 to +0.1)		
Constipation	+0.4 (+0.1 to +0.6)	-0.2 (-0.8 to +0.4)		
Diarrhoea	+0.5 (+0.2 to +0.7)	-0.1 (-0.7 to +0.6)		
Vomiting	+0.3 (-0.6 to +0.4)	-0.1 (-0.6 to +0.4)		

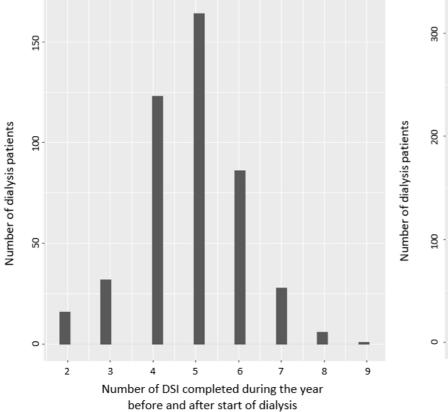
Neurological		
Difficulty concentrating	+0.6 (+0.4 to +0.8)	-0.1 (-0.7 to +0.5)
Restless legs	+0.5 (+0.2 to +0.7)	-0.2 (-0.8 to +0.4)
Headache	+0.0 (-0.2 to +0.2)	-0.0 (-0.5 to +0.4)
Dizziness	+0.4 (+0.1 to +0.6)	-0.1 (-0.7 to +0.5)
Tingling in feet	+0.3 (+0.1 to +0.5)	+0.3 (-0.3 to +0.8)



**Supplemental Figure 1.** Flow diagram indicating the selection of EQUAL Study participants.

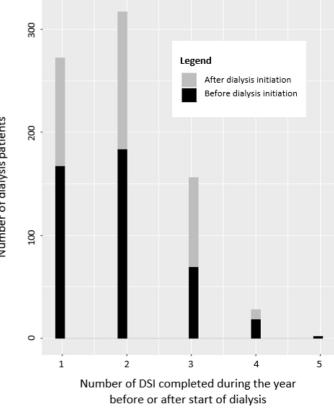
DSI: dialysis symptom index, eGFR: estimated glomerular filtration rate

**Supplemental Figure 2.** Histograms indicating the number of completed DSI questionnaires per dialysis patient in total (left) or during the year before or after start of dialysis (right).



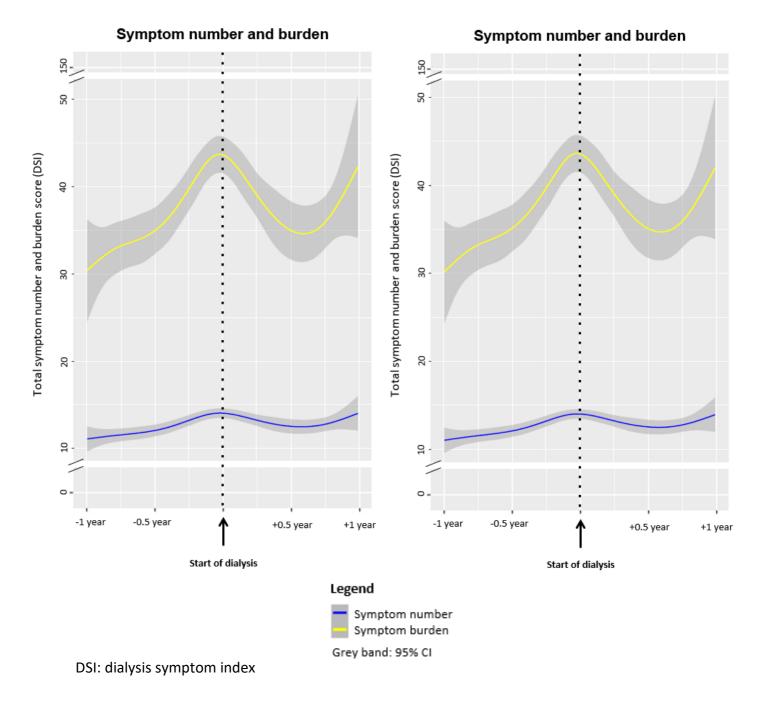
Total number of DSI completed per dialysis patient

Number of DSI completed per dialysis patient before or after dialysis initiation

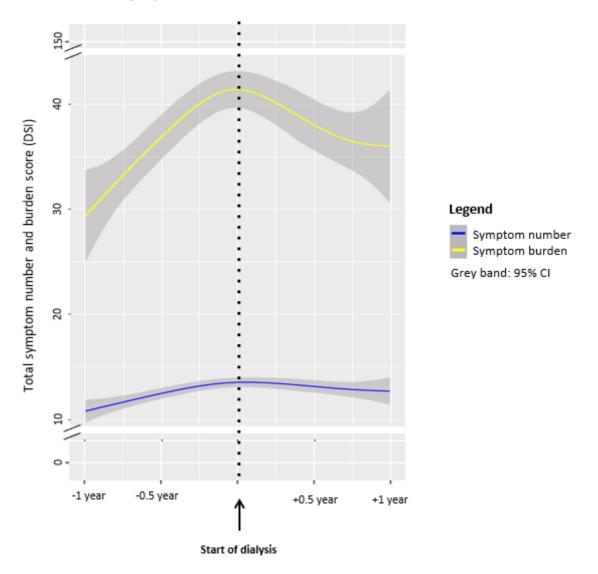


DSI: dialysis symptom index

**Supplemental Figure 3.** Evolution of symptom number (blue) and burden (yellow) with additional knots at 3 [left] and 1 [right] months before and after start of dialysis in 456 older patients.



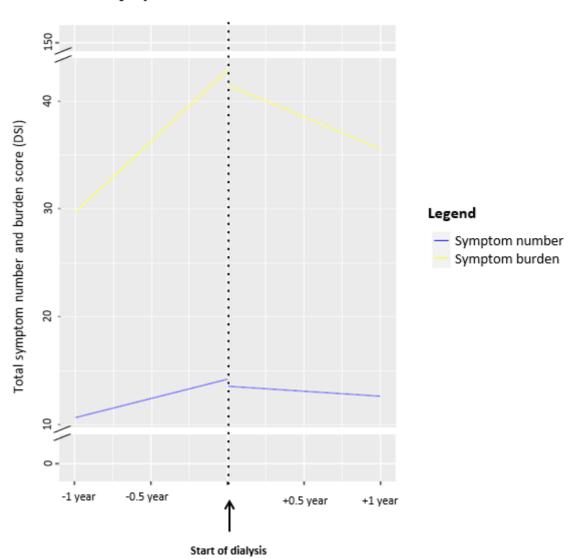
**Supplemental Figure 4.** Evolution of symptom number (blue) and burden (yellow) in the year before and after start of dialysis in 456 older patients, with adjustments for age, sex, diabetes and cardiovascular disease in order to correct for symptom data missing at random explained by these variables.



## Symptom number and burden

DSI: dialysis symptom index

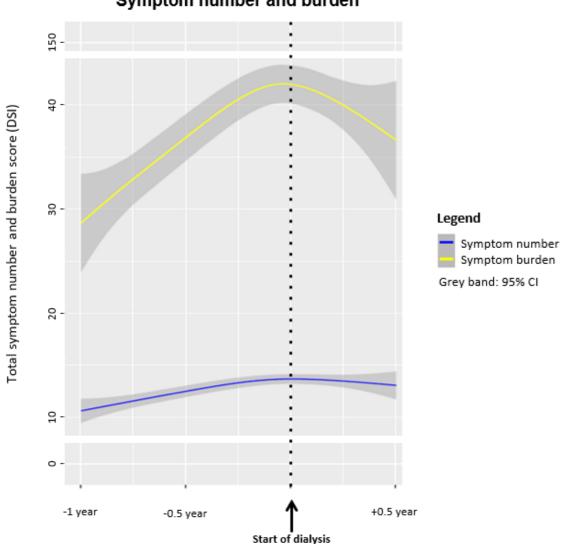
**Supplemental Figure 5.** Linear change of symptom number (blue) and burden (yellow) in the year before and after start of dialysis in 456 older patients, including a discontinuous change at start of dialysis.



Symptom number and burden

DSI: dialysis symptom index

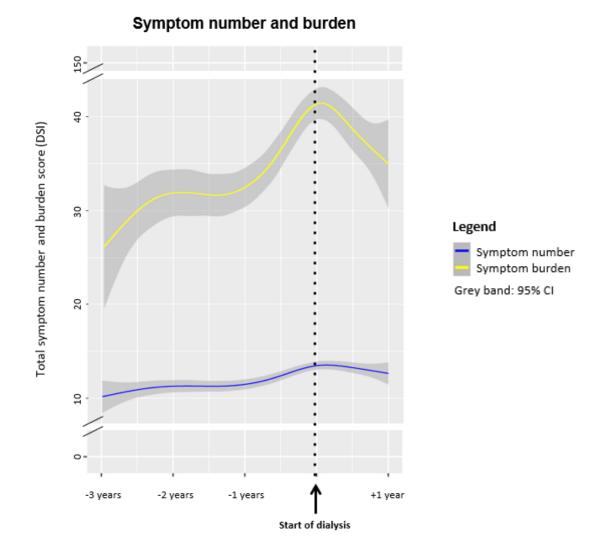
**Supplemental Figure 6.** Evolution of symptom number (blue) and burden (yellow) with restriction of follow-up to 1 year before and 0.5 year after start of dialysis in 449 older patients.



Symptom number and burden

DSI: dialysis symptom index

**Supplemental Figure 7.** Evolution of symptom number (blue) and burden (yellow) with extension of follow-up to 3 years before and 1 year after start of dialysis in 496 older patients.



DSI: dialysis symptom index