



Outcome of our predialysis patient population between 2009–2014

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Background

Advanced chronic renal failure patients number increased in our nephrology outpatient department.

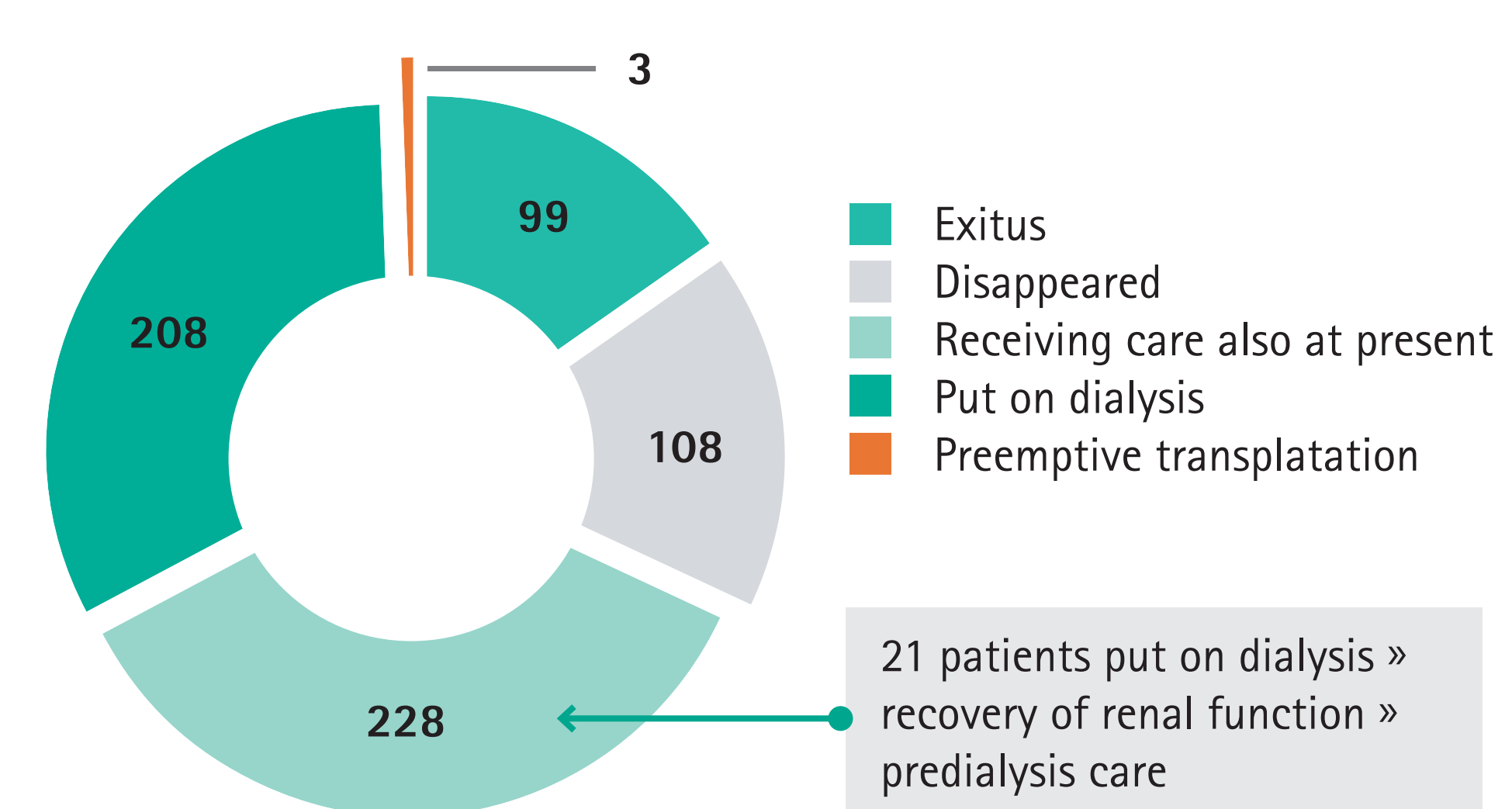
Our CKD stage 4–5 patients under outpatient nephrological care between 2009–2014

	all patients 646 pts	≤ 65 years 194 pts 30%	> 65 years 452 pts 70%
average age at the start of care (years)	69.0±14.0	51.7±11.0	76.4±6.6
average age at the time of study or drop out (years)	72.5±13.5	56.4±11.5	79.5±6.7
average length of care time up to 31 December 2014 or to the drop out date (years)	3.5±3.9	4.7±5.4	3.0±2.9
starting GFR (mL/min/1.73m ²)	16.8±3.6	16.3±3.8	17.0±3.5
closing GFR (mL/min/1.73m ²)	18.2±9.7	17.3±12.5	18.6±8.2
average GFR change/year (mL/min/1.73m ²)	+0.40	+0.32	+0.53

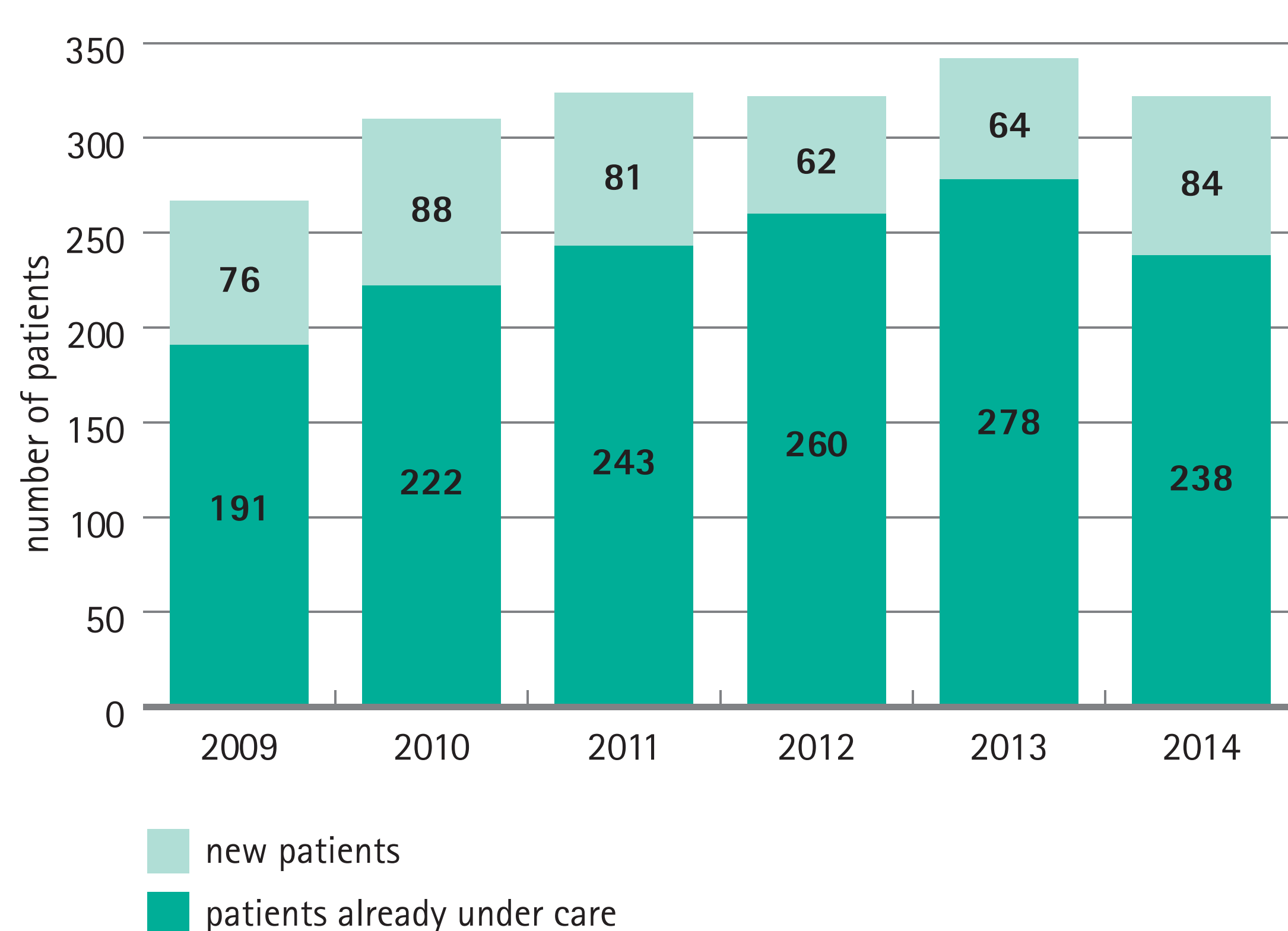
Patient, method, objective

In the period of study, our outpatient clinic for nephrology was visited by a total of 646 patients with GFR values below 20 mL/min/73m², i.e. suffering from chronic kidney disease (CKD) stage 4 or 5. The fate of these patients entering the predialysis stage was monitored from 2009 up to the end of 2014.

Fate of patients with CKD stage 4–5 n=646



Number of patients receiving care with a GFR <20 mL/min/1.73m² 2009–2014 n=646



„Disappeared” patients n=108 (16.7%)

	all disappeared patients 108 pts	≤ 65 years 24 pts 22.2%	> 65 years 84 pts 77.8%
average age at the start of care (years)	73.4±12.6	54.4±9.9	78.8±6.7
average age at drop out (years)	76.7±11.7	59.7±9.1	81.6±6.9
average length of care time (years)	3.3±4.3	5.3±6.8	2.8±2.9
starting GFR (mL/min/1.73m ²)	17.1±3.2	16.8±3.1	17.2±3.2
closing GFR (mL/min/1.73m ²)	21.1±12.5	25.1±17.6	19.9±10.2

Change of the GFR of „disappeared” patients n=108 (16.7%)

	GFR improved 28 pts 25.9%	GFR decreased or unchanged 80 pts 74.1%
average age at the start of care (years)	72.5±15.1	73.7±11.7
average age at drop out (years)	75.6±14.1	77.2±10.3
average length of care time (years)	3.2±2.5	3.6±6.2
starting GFR (mL/min/1.73m ²)	15.8±3.3	18.4±2.6 / 17.1±2.3
closing GFR (mL/min/1.73m ²)	36.3±15.4	13.4±4.3 / 17.1±2.3
average GFR change/year (mL/min/1.73m ²)	+6.40	-1.04

Predialyzed patients at the end of study n=228 (35.4%)

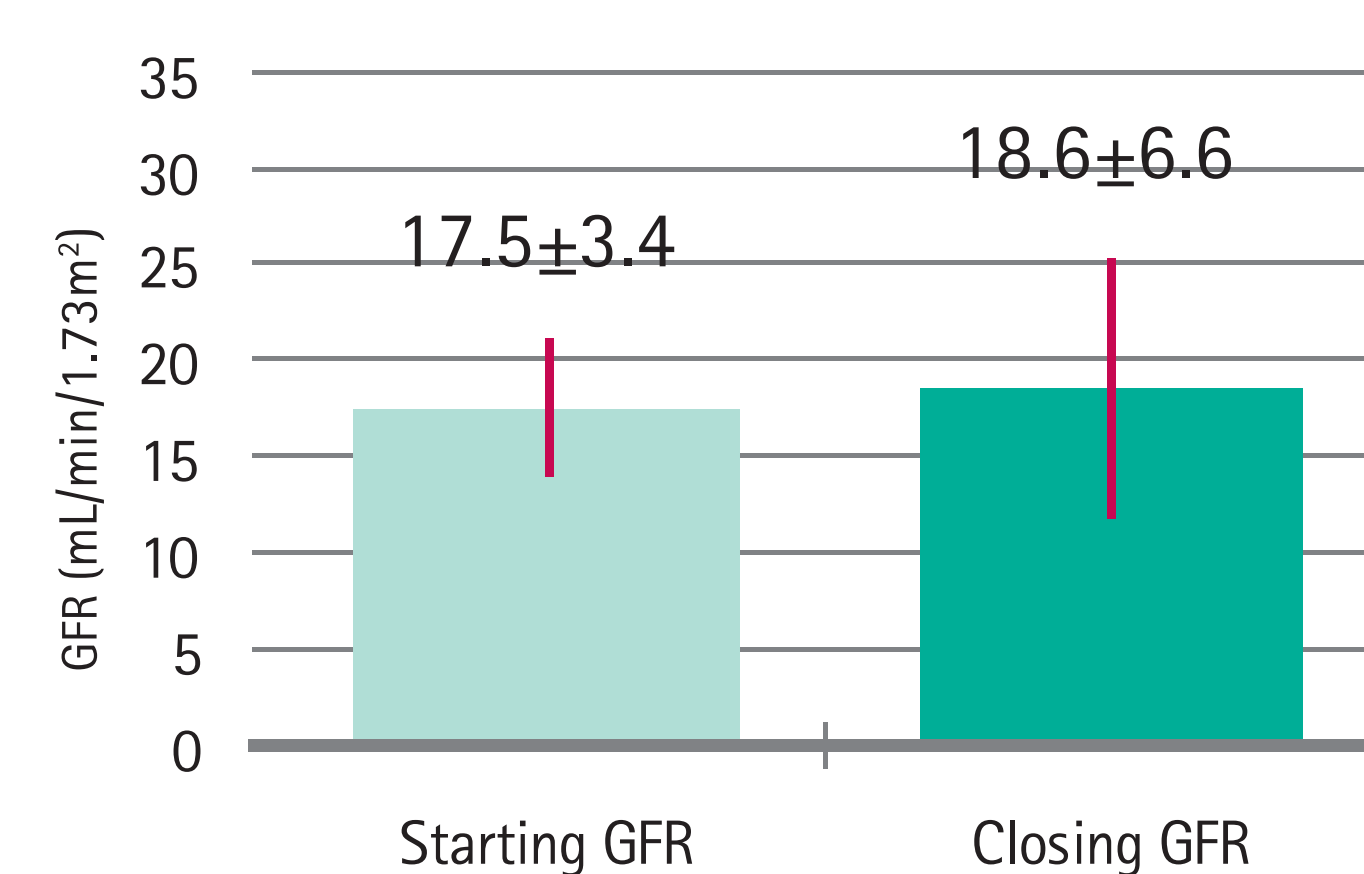
	all pts 228 pts	≤ 65 years 56 pts 24.6%	> 65 years 172 pts 75.4%
average age at the start of care (years)	70.9±12.7	53.2±10.4	76.7±6.5
average age at the end of study (years)	75.1±12.1	59.0±11.0	80.4±6.4
average length of care time (years)	4.2±3.9	5.8±5.6	3.7±2.9
starting GFR (mL/min/1.73m ²)	17.1±3.4	16.7±3.7	17.2±3.3
closing GFR (mL/min/1.73m ²)	21.3±10.8	21.7±16.6	21.2±7.9
average GFR change/year (mL/min/1.73m ²)	+1.00	+0.86	+1.08

Change of the GFR of predialyzed patients n=228 (35.4%)

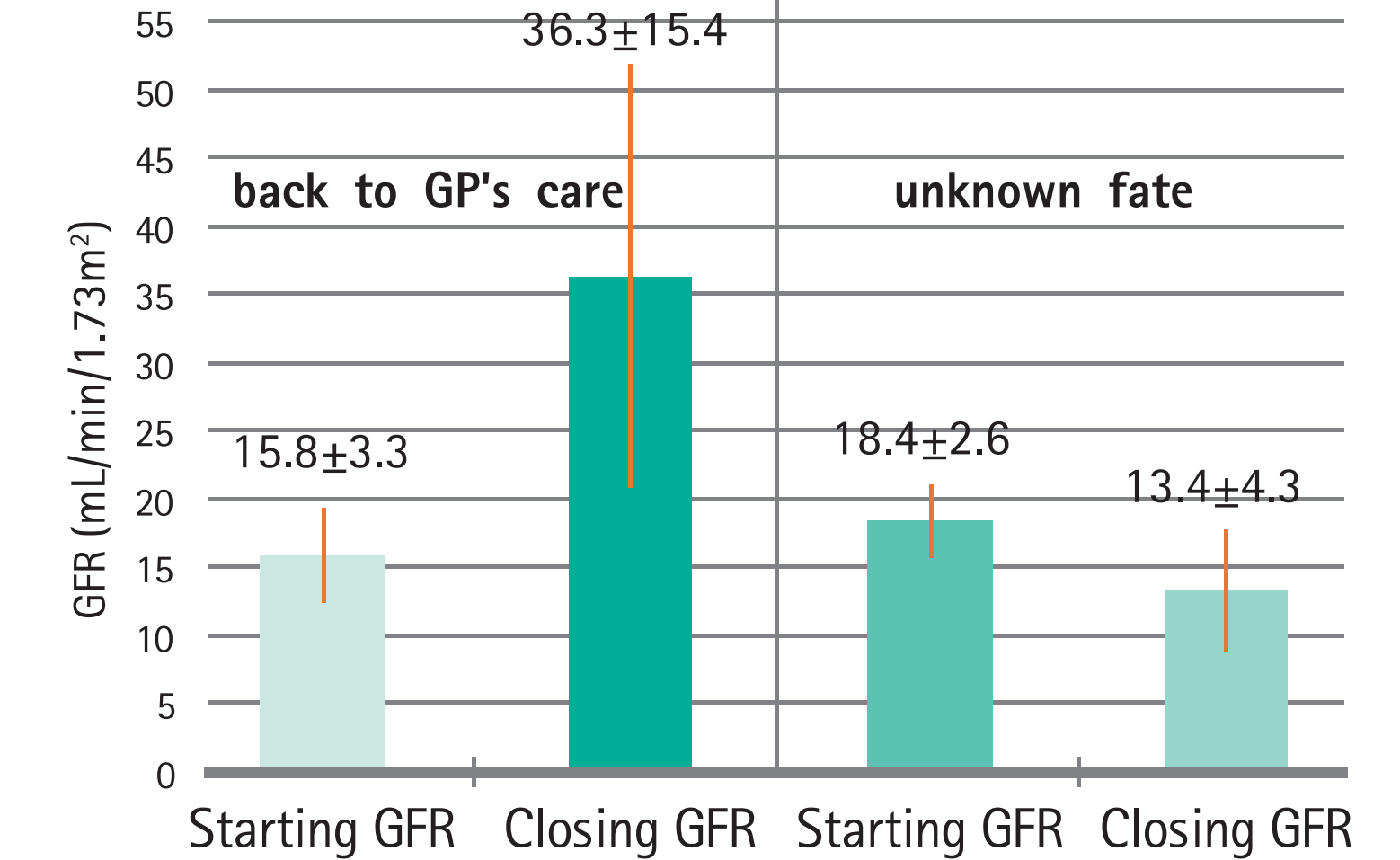
	GFR improved 79 pts 34.6%	GFR decreased 129 pts 56.6%	GFR unchanged 20 pts 8.8%
average age at the start of care (years)	73.5±12.1	69.7±11.9	68.8±16.6
average age at the end of study (years)	77.0±11.9	74.5±10.8	71.6±17.3
average length of care time (years)	3.5±2.5	4.8±4.3	2.9±2.7
starting GFR (mL/min/1.73m ²)	18.1±4.8	19.9±4.4	17.8±6.3
closing GFR (mL/min/1.73m ²)	30.0±13.0	16.5±4.8	
age of the youngest patient (years)	26.3	27.6	30.2
age of the oldest patient (years)	95.4	92.9	84.3

Change of the GFR

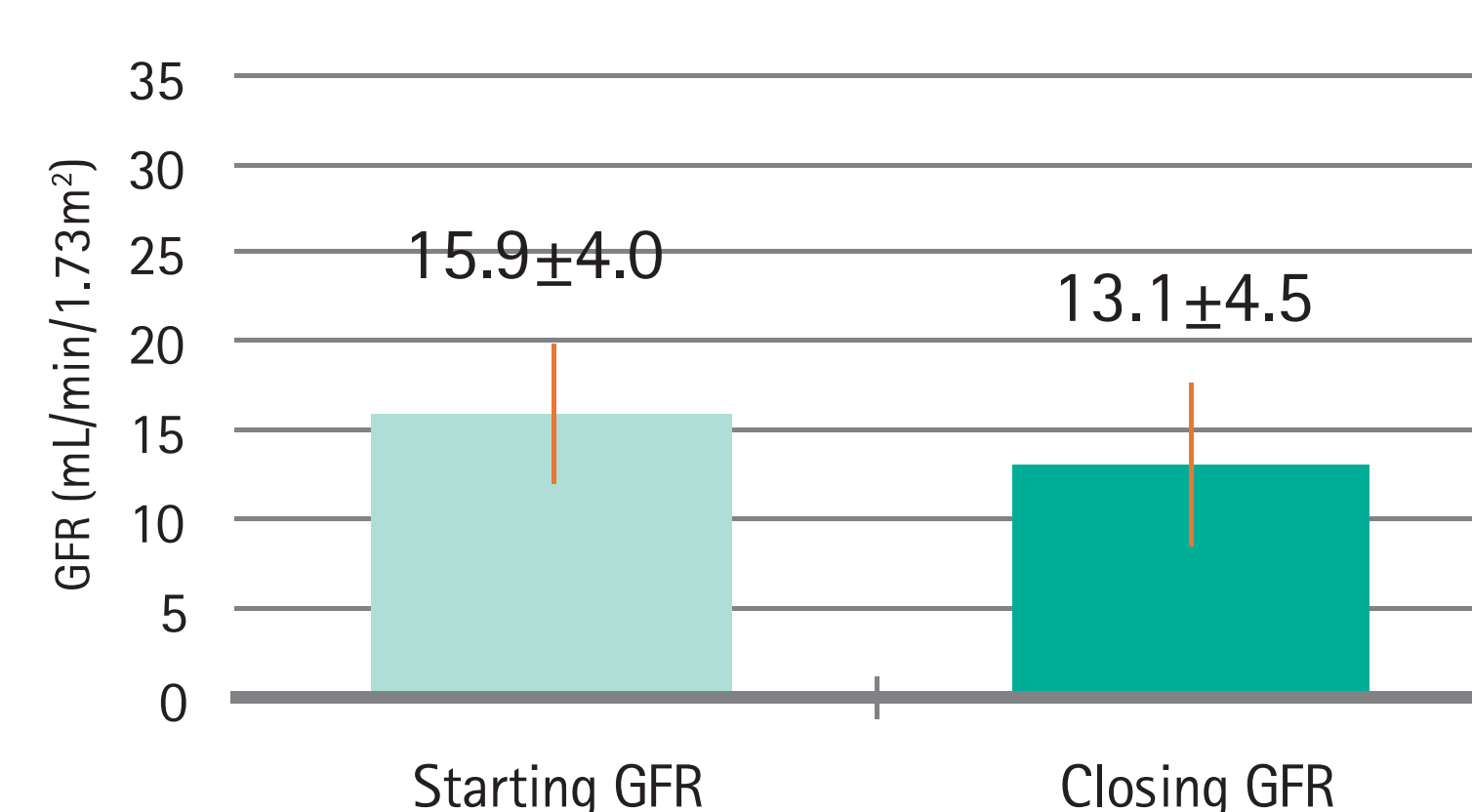
Died patients n=99 (15.2%) (duration of care: 3.3±3.3 years)



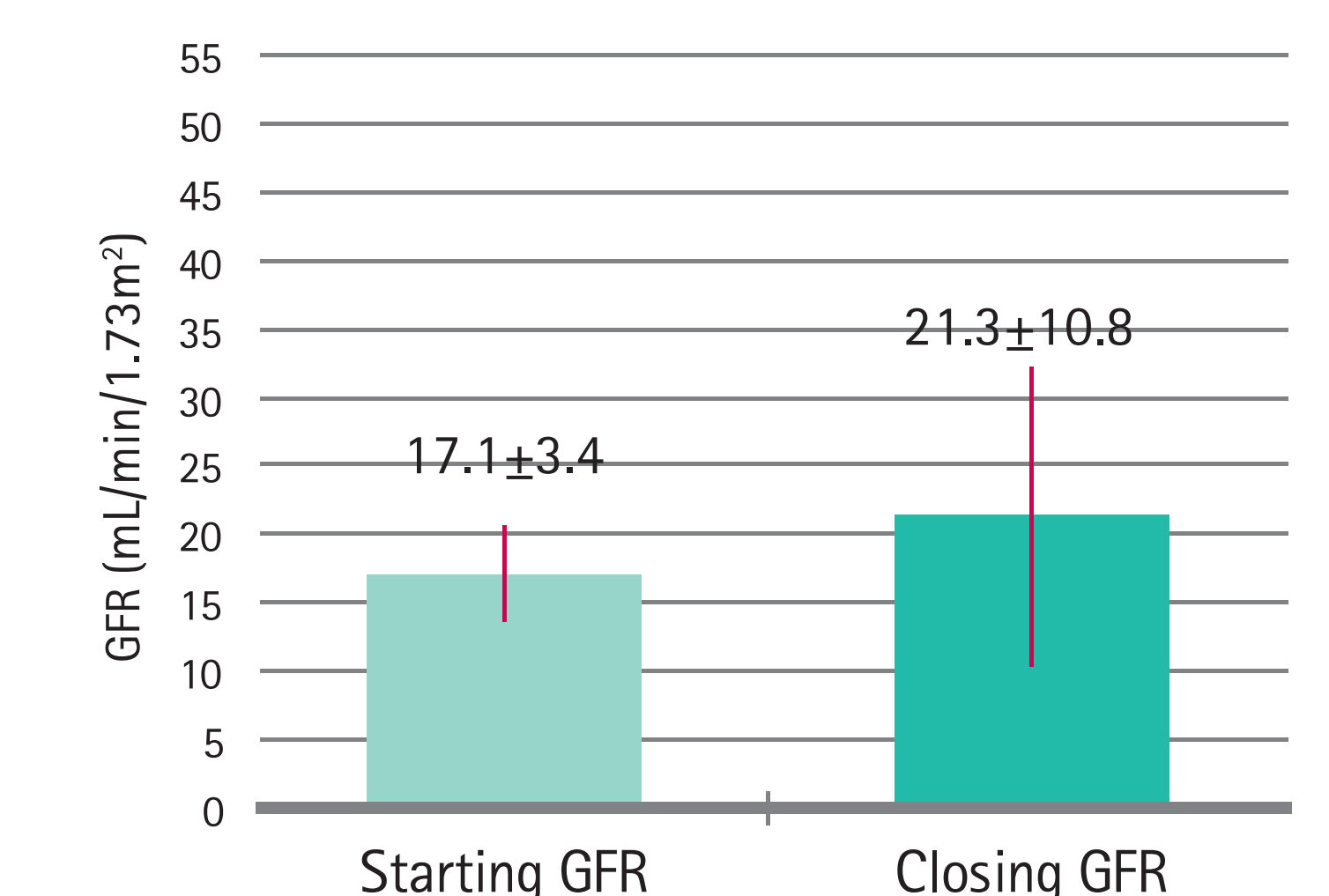
„Disappeared” patients n=108 (16.7%) (duration of care: 3.3±4.3 years)



Patients got in dialysis n=208 (32.2%) (duration of care: 3.1±4.0 years)



Patients under care at present n=228 (35.4%) (duration of care: 4.2±3.9 years)



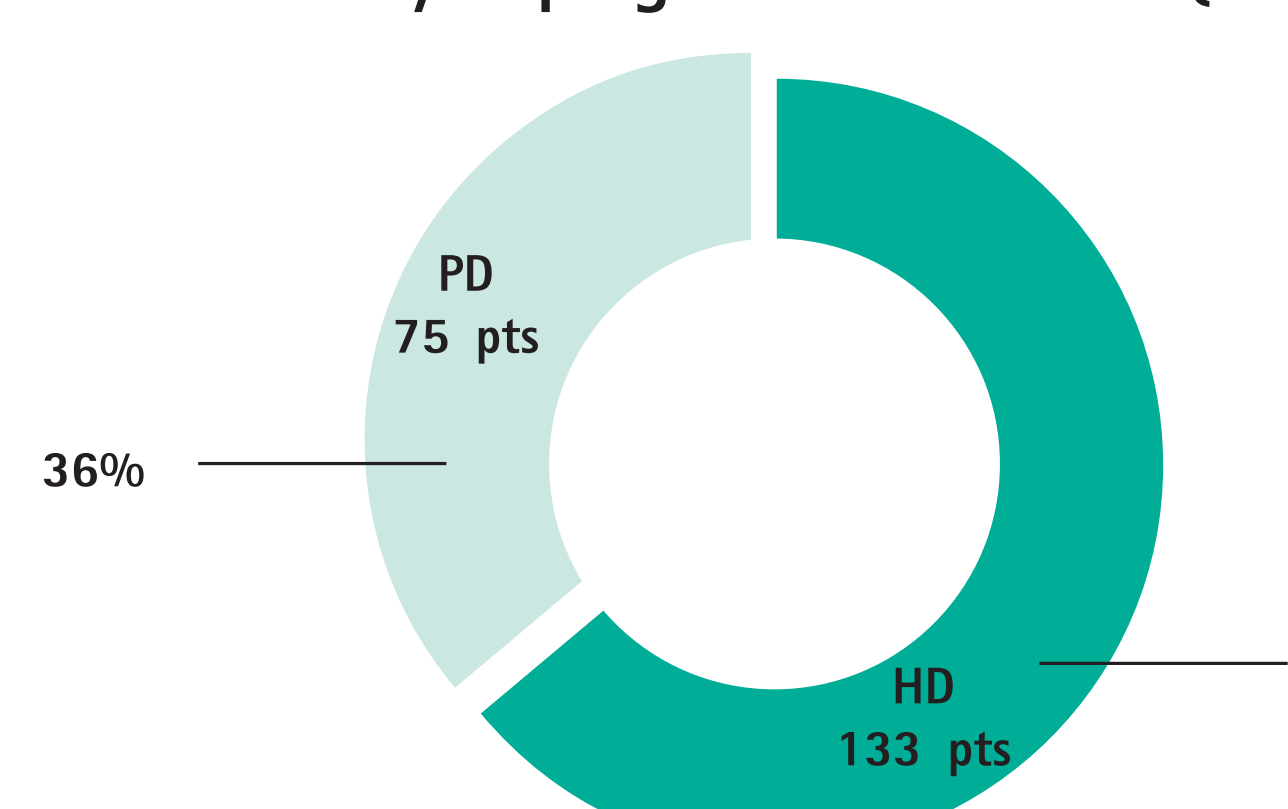
Died patients n=99 (15.2%)

	all died pts 99 pts	≤ 65 years 17 pts 17.2%	> 65 years 82 pts 82.8%
average age at the start of care (years)	73.4±11.2	53.9±8.1	77.5±6.3
average age at drop out (years)	76.4±11.5	55.9±9.3	80.7±6.0
average length of care time (years)	3.0±3.0	2.0±2.7	3.2±2.9
starting GFR (mL/min/1.73m ²)	17.5±3.4	17.0±3.0	17.6±3.5
closing GFR (mL/min/1.73m ²)	18.6±6.6	17.6±5.2	18.8±6.7

Patients got in dialysis n=208 pts (32.2%)

	all dialyzed pts 208 pts			HD 133 pts 64%		PD 75 pts 36%	
	all 208 pts	HD 133 pts 64%	PD 75 pts 36%	≤65 years 53 pts 40%	>65 years 80 pts 60%	≤65 years 42 pts 56%	>65 years 33 pts 44%
average age at the start of care (years)	63.0±14.4	65.6±12.7	58.6±15.7	53.0±9.6	73.9±5.9	47.6±12.1	72.6±5.2
average age at the start of dialysis (years)	66.1±13.8	68.5±12.0	62.0±15.3	56.8±9.4	76.2±5.6	52.4±13.9	74.4±4.6
average length of care time (years)	3.1±4.0	2.9±3.8	3.5±4.3	3.9±5.0	2.3±2.4	4.8±5.0	1.7±2.1
starting GFR (mL/min/1.73m ²)	15.9±4.0	15.7±4.2	16.1±3.5	15.5±4.4	15.9±4.0	16.0±3.5	16.3±3.5
closing GFR (mL/min/1.73m ²)	13.1±4.5	12.8±4.6	13.5±4.1	12.3±4.2	13.2±4.8	12.8±4.2	14.4±3.7
average GFR change/year (mL/min/1.73m ²)	-0.90	-1.00	-0.74	-0.82	-1.17	-0.66	-1.11

Distribution of patients transferred from nephrological care to the dialysis programme n=208 (32.2%)



Conclusions

- The deceased patients were older, the main cause of death was cardiovascular.
- 36% of the dialysis starter patients chose PD. This is the result of our conceptual patient care.
- Nearly 40% of our nephrology patients' renal insufficiency didn't decline in the last 4.2 years. This is the success of care.