

ESTIMATED GLOMERULAR FILTRATION RATE AT INITIATION OF DIALYSIS AND OUTCOMES AMONG PATIENTS WITH END-STAGE RENAL DISEASE TREATED WITH TWICE-WEEKLY HEMODIALYSIS.

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INTRODUCTION AND AIMS: Most ESRD patients in resource-limited setting were treated with twice-weekly hemodialysis (HD), however limited data about outcomes according to eGFR at initiation of dialysis was available. We aimed to analyze association of eGFR at start of dialysis and outcomes.

METHODS: A prospective multi-center cohort study was conducted in 11 HD centers of the Northeast of Thailand. The participants aged of 18 to 80 years, undertaken chronic twice-weekly or thrice-weekly HD for at least 3 months were recruited. Clinical parameters and eGFR at initiation of dialysis were recorded at recruitment. Time to death was observed. Kaplan-Meier method and Cox regression analysis were computed.

RESULTS: A total of 407 participants with baseline spKt/V were recruited. They were 231 male with mean age of 55 years and 33% of them were diabetes mellitus (Table1). Median follow up time was 13.7 months. During the total follow-up time, 4,937 patient-months, 27 (6.6%) patients died. Death rates according to eGFR quartiles: 1) 0.93 - 2.57, 2) 2.58 - 3.54, 3) 3.55 - 5.11 and 4) 5.13 - 22.65 were not significant difference, 3.9%, 8.8%, 5.9% and 7.9% consecutively, p=0.49 (Figure1). The one year survival probability of late initiation group (baseline eGFR 5ml/min, n=104), 0.93 (95% CI; 0.85 to 0.96), hazard ratio = 0.74, 95% CI; 0.3 to 1.7, p=0.49 (Figure2). There was no significant difference in incidence of death between late initiation group (5.1/1,000 patient-months) and conventional group (6.6/100 patient-months), log rank test p-value=0.48.

Table1. Baseline characteristics

Characters	eGFR<5* N=303 (74.4%)	eGFR≥5* N=104
Male	164 (54.1)	67 (64.4)
Age, year	57.6±12.6	53.8±13.7
ICED score	1.2±0.7	1.3±0.8
Causes of ESRD		
Diabetes	80 (26.4)	40 (38.6)
Hypertension	57 (18.8)	25 (24.0)
Glomerulonephritis	25 (8.3)	6 (5.8)
Others	45 (14.8)	13 (12.5)
Unknown	96 (31.7)	20 (19.2)
Time on HD, month	42.2 (31.8)	32.3 (27.2)
Anuria (<100ml/day)	148 (48.8)	41 (39.4)
Albumin	3.8±0.5	3.6±0.5

Figure2. Kaplan-Meier curves according to conventional and late initiation group

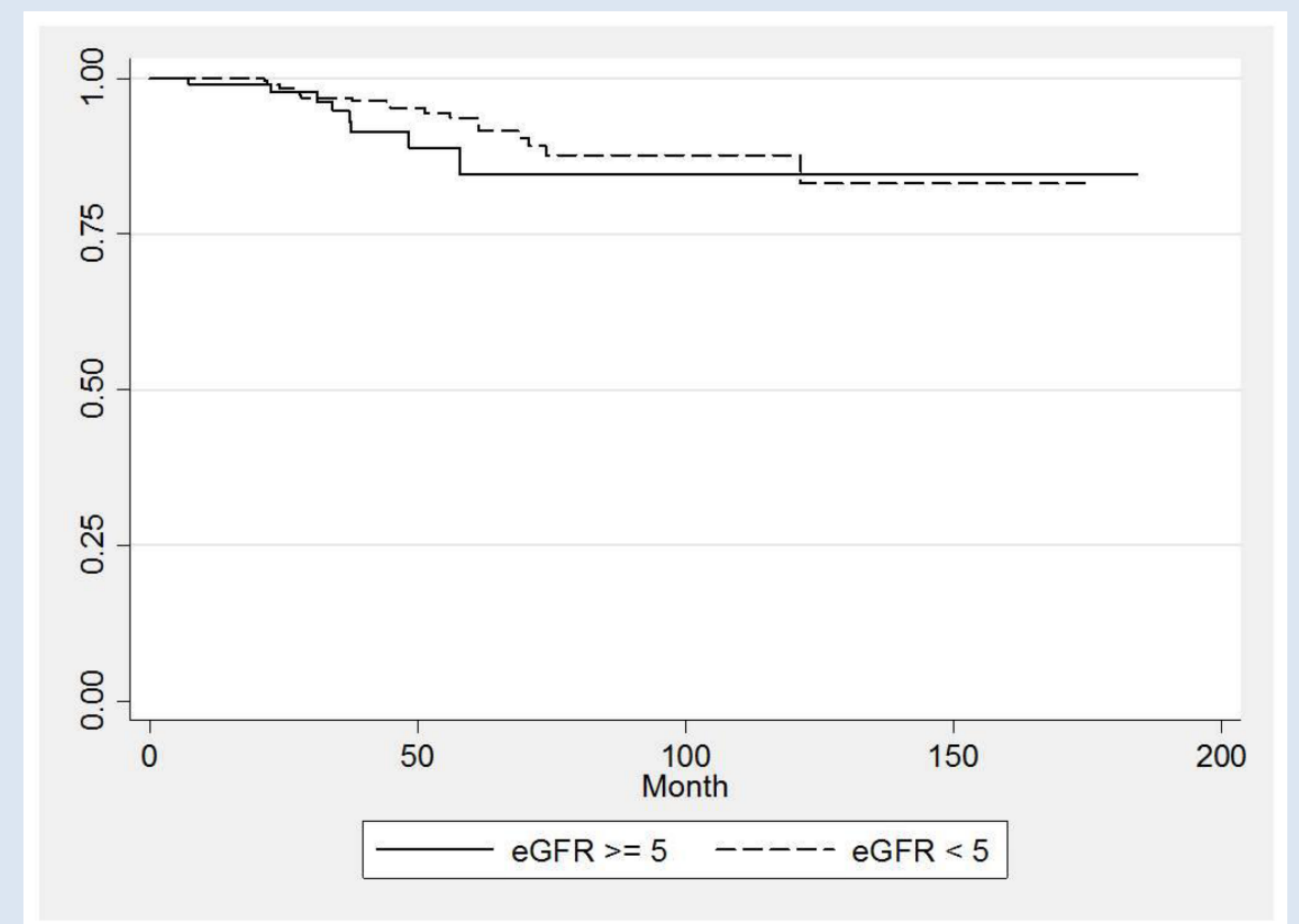
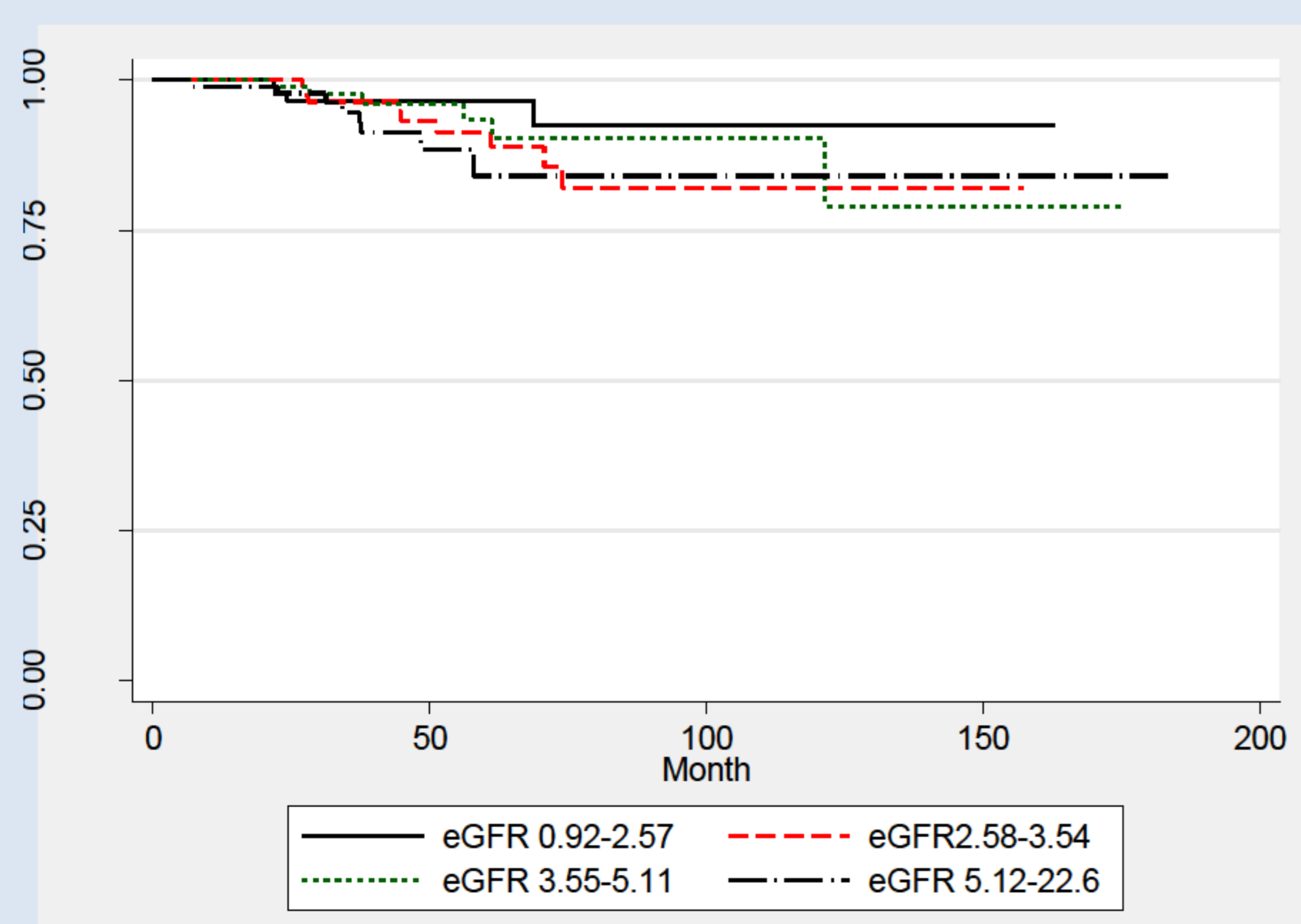


Figure1. Kaplan-Meier curves according to initial eGFR quartiles



CONCLUSIONS: Participants who were treated with twice a week of hemodialysis for at least three months, patients with late initiation of dialysis at eGFR<5ml/min had similar one year survival rate when compare to those initiated earlier.

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