

CI 0.47 to 0.91;  $p=0.01$ ) see Table 2. Main cause of hospitalization was cardio-cerebrovascular (Table 3). We observed no differences in hospitalization duration or survival.

**Table 1. Baseline characteristics of the study population according to dialyzers.**

Characteristics	HF-HD n= 534	HDx n= 564	P-value
Age, mean (SD)	60.39 (14.86)	60.79 (15.01)	0.66
Age category; N (%)			
18 – 44	85 (15.92)	87 (15.43)	
45 – 64	211 (39.51)	218 (38.65)	0.90
>=65	238 (44.57)	259 (45.92)	
Female; N (%)	186 (34.83)	228 (40.43)	0.06
Race			
African-American	55 (10.30)	28 (4.96)	0.00
Mestizo	479 (89.70)	536 (95.04)	
CKD cause; N (%)			
Hypertension	152 (28.46)	168 (29.79)	
Diabetes	192 (35.96)	217 (38.48)	
Glomerular disease	41 (7.68)	44 (7.80)	0.49
Obstructive	37 (6.93)	35 (6.21)	
Polycystic kidney disease	14 (2.62)	16 (2.84)	
Unknown	64 (11.99)	64 (11.35)	
Other	34 (6.37)	20 (3.55)	
Diabetes history, n (%)	214 (40.07)	246 (43.62)	0.23
Hypertension history	491 (91.95)	540 (95.74)	0.01
Cardiovascular disease history, n (%)	86 (16.10)	121 (21.45)	0.02
Comorbidity index, mean (SD)	2.039 (1.792)	2.170 (1.946)	0.43
Karnofsky scale, mean (SD)	75.581 (15.913)	78.528 (13.842)	0.01
Dialysis vintage, mean (SD)	5.60 (5.51)	5.88 (5.48)	0.40
Hemoglobin, mean (SD) g/dL	11.55 (1.92)	11.88 (1.74)	0.00
Albumin, mean (SD) g/dL	3.95 (0.45)	4.02 (0.34)	0.00
Urine output, mean (SD)	1.266 (0.442)	1.270 (0.444)	0.89

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#### **EFFECTIVENESS OF MEDIUM CUT-OFF VS HIGH FLUX DIALYZERS: A PROPENSITY SCORE MATCHING COHORT STUDY**

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**BACKGROUND AND AIMS:** According to emerging evidence, medium cut-off membrane improves clearance of molecules larger than 25 kDa, including larger uremic toxins. There is growing evidence on clinical effectiveness outcomes associated with the use of these membranes.

Our aim was to evaluate clinical effectiveness of medium cut-off (HDx) versus high flux (HF-HD) dialyzers in terms of hospitalization rate and duration, cardiovascular event rate and survival in a HD prevalent cohort in Colombia through an observational, multicenter retrospective cohort analysis.

**METHOD:** Adult Prevalent HD patients (> 90 days in HD) at Baxter Renal Care Services Colombia were included between September 1st, 2017 to November 30th, 2017 (follow-up until 2 years). Socio-demographic and clinical characteristics of all patients were summarized descriptively. Inverse probability of treatment weighting on the propensity score was used to balance comparison groups on indicators of baseline socio-demographic and clinical characteristics. Weighted incidence rate ratios (IRRs) and rates and duration of hospitalization and cardiovascular events according to dialyzer type were obtained using binomial negative regression with the weighting sample.

**RESULTS:** We evaluated 1098 patients (37.7% women): 534 in HF-HD vs 564 in HDx (Table 1), median age was 60.6 years. Mean time on HD was 5.6 years (SD 5.51) for HF-HD and 5.88 for HDx (SD 5.48)

We observed lower hospitalization rates in HDx group, (IRR HDx/HF-HD: 0.82 95% CI 0.69 to 0.98;  $p=0.03$ ); and cardiovascular events rate, (IRR HDx/HF-HD: 0.65 95% CI 0.47 to 0.91;  $p=0.01$ ) see Table 2. Main cause of hospitalization was cardio-cerebrovascular (Table 3). We observed no differences in hospitalization duration or survival.

**CONCLUSION:** We evaluated 1098 patients (37.7% women): 534 in HF-HD vs 564 in HDx (Table 1), median age was 60.6 years. Mean time on HD was 5.6 years (SD 5.51) for HF-HD and 5.88 for HDx (SD 5.48)

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**Table 2. Hospitalization, hospital stay and cardio-vascular events for full sample and matched population**

	Full sample (Unadjusted rates)			Negative binomial regression with weighting sample		
	Estimate	95% CI	P-value	Estimate	95% CI	P-value
<b>Hospitalization events</b>						
Rate per patient-year						
HF-HD	1.065	0.993 ; 1.136		1.10	0.95 ; 1.25	
HDx	0.786	0.729 ; 0.843		0.90	0.80 ; 1.00	
Incidence Rate Ratio	0.738	0.669 ; 0.815	0.000	0.82	0.69 ; 0.98	0.03
<b>Hospital days</b>						
Rate per patient-year						
HF-HD	10.180	9.959 ; 10.401		13.09	10.11 ; 16.07	
HDx	6.451	6.288 ; 6.615		12.16	8.95 ; 15.38	
Incidence Rate Ratio	0.634	0.613 ; 0.655	0.000	0.93	0.66 ; 1.32	0.68
<b>Cardiovascular events</b>						
Rate per patient-year						
HF-HD	0.246	0.211 ; 0.280		0.27	0.20 ; 0.33	
HDx	0.158	0.132 ; 0.183		0.17	0.14 ; 0.21	
Incidence Rate Ratio	0.643	0.519 ; 0.796	0.000	0.65	0.47 ; 0.91	0.01

**Table 3. Causes of hospitalization in the full sample according to exposure status.**

Causes of hospitalization	Full sample		HDx		HF-HD	
	N	%	N	%	N	%
Bacteremia/septicemia/infections	111	7,021	46	6,327	65	7,611
Cardiovascular and cerebrovascular disease	473	29,918	207	28,473	266	31,148
Genitourinary diseases	80	5,060	33	4,539	47	5,504
Central nervous system diseases	22	1,392	10	1,376	12	1,405
Musculoskeletal diseases	36	2,277	15	2,063	21	2,459
Respiratory system diseases	161	10,183	80	11,004	81	9,485
Hematopoietic diseases	53	3,352	14	1,926	39	4,567
Endocrine and metabolic diseases	97	6,135	47	6,465	50	5,855
Digestive system diseases	180	11,385	97	13,343	83	9,719
Others	192	12,144	97	13,343	95	11,124
Skin and subcutaneous tissue disorders	60	3,795	23	3,164	37	4,333
Mental disorders	11	0,696	5	0,688	6	0,703
Traumatic lesions	66	4,175	35	4,814	31	3,630
Tumour/Neoplasia	32	2,024	16	2,201	16	1,874
Unknown	7	0,443	2	0,275	5	0,585
<b>Total</b>	<b>1581</b>	<b>100,000</b>	<b>727</b>	<b>100,000</b>	<b>854</b>	<b>100,000</b>