

Table S1. Distribution of socio-demographic, clinical, and welfare characteristics according to type of vascular access for hemodialysis initiation (AVF and CVC). Incident hemodialysis patients from RRDTL Lazio Region (Italy) 2008–2018.

VASCULAR ACCESS								
		AVF			CVC			p-Value *
		N	%col	%row	N	%col	%row	
Total		4422	100.0	48.7	4646	100.0	51.2	9068
Gender								<0.001
	Males	3078	69.6	52.5	2790	60.1	47.6	5868
	Females	1344	30.4	42.0	1856	40.0	58.0	3200
Age (years) mean ± std		4422	69.6±14.2		4646	66.8±14.2		9068
Age class (years)								<0.001
	19–49	599	13.6	54.8	495	10.7	45.3	1094
	50–64	1011	22.9	52.3	923	19.9	47.7	1934
	65–74	1239	28.0	51.9	1149	24.7	48.1	2388
	75–84	1300	29.4	45.8	1537	33.1	54.2	2837
	85+	273	6.2	33.5	542	11.7	66.5	815
Education qualification								<0.001
	No qualifications/Elementary School/Middle School	2777	62.8	46.4	3203	68.9	53.6	5980
	High School/Degree and more	1645	37.2	53.3	1443	31.1	46.7	3088
Body Mass Index								<0.001
	Underweight (BMI < 18.0)	184	4.2	37.5	307	6.6	62.5	491
	Normal weight (18.0 ≤ BMI < 25.0)	2200	49.8	47.5	2432	52.4	52.5	4632
	Overweight (25.0 ≤ BMI < 30.0)	1399	31.6	52.2	1282	27.6	47.8	2681
	Obese (BMI ≥ 30.0)	639	14.5	50.6	625	13.5	49.5	1264
Self-sufficient								<0.001
	Complete	2565	58.0	60.4	1679	36.1	39.6	4244
	Little self-sufficient	1235	27.9	46.9	1400	30.1	53.1	2635
	Not self-sufficient	622	14.1	28.4	1567	33.7	71.6	2189
Comorbidities								
	Heart disease	1352	30.6	41.1	1941	41.8	58.9	3293
	Peripheral vascular diseases	538	12.2	40.7	785	16.9	59.3	1323
	Cerebrovascular disease	519	11.7	41.5	732	15.8	58.5	1251
	Chronic obstructive pulmonary disease	497	11.2	38.6	790	17.0	61.4	1287
	Cancer	443	10.0	40.1	663	14.3	60.0	1106
	Lipid metabolism's alteration	317	7.2	51.3	301	6.5	48.7	618
	Neurological disease	93	2.1	32.6	192	4.1	67.4	285
	Cardiovascular Risk Factors (Hypertension, Obesity, Diabetes)	3560	80.5	50.4	3501	75.4	49.6	7061
Type of dialysis unit								<0.001
	Public hospital	1511	34.2	44.6	1875	40.4	55.4	3386

Private clinic	2911	65.8	51.2	2771	59.6	48.8	5682
Pre-dialysis counselling							<0.001
Yes	3803	86.0	55.7	3031	65.2	44.4	6834
No	618	27.7	14.0	1614	72.3	34.7	2232

* Chi-square test or Fisher's exact for categorical variable and T-test for continuous variables.

Table S2. Association between gender (Female vs Male) and type of vascular access (AVF vs. CVC) for hemodialysis initiation adjusted for socio-demographic, clinical, and welfare variables. Univariable and multivariable logistic regression.

Effect	Univariable Model				Multivariable Model			
	OR	95%CI	p-Value		OR	95%CI	p-value	
Gender Female vs. Male	0.66	0.60 0.72	<0.001		0.64	0.58 0.71	<0.001	
Age (years) (ref 19–49) 50–64	0.91	0.78 1.05	0.189		0.95	0.81 1.12	0.544	
65–74	0.89	0.77 1.03	0.116		1.10	0.93 1.29	0.260	
75–84	0.70	0.61 0.80	<0.001		1.00	0.85 1.18	0.984	
85+	0.42	0.35 0.50	<0.001		0.79	0.64 0.98	0.035	
BMI (Kg/m²) (ref Normal weight 18.0 ≤ BMI ≤ 25.0) Underweight BMI < 18.0	1.13	1.00 1.28	0.054		1.08	0.94 1.25	0.259	
Overweight 25.0 ≤ BMI ≤ 30.0	0.66	0.55 0.80	<0.001		0.80	0.65 0.98	0.035	
Obese BMI ≥ 30	1.21	1.10 1.33	<0.001		1.14	1.03 1.27	0.012	
Self-sufficient (ref Complete) Little self-sufficient	0.26	0.23 0.29	<0.001		0.34	0.30 0.39	<0.001	
Not self-sufficient	0.58	0.52 0.64	<0.001		0.67	0.60 0.74	<0.001	
Cardiovascular Risk Factors (Hypertension, Obesity, Diabetes) Yes vs. No	1.35	1.22 1.49	<0.001		1.21	1.08 1.35	0.001	
Heart disease Yes vs. No	0.61	0.56 0.67	<0.001		0.71	0.64 0.78	<0.001	
Peripheral vascular diseases Yes vs. No	0.68	0.59 0.78	<0.001		0.84	0.73 0.98	0.025	
Cancer Yes vs. No	0.67	0.59 0.76	<0.001		0.69	0.60 0.79	<0.001	
Chronic obstructive pulmonary disease Yes vs. No	0.62	0.55 0.70	<0.001		0.72	0.63 0.82	<0.001	
Type of dialysis unit Private clinic vs. Public hospital	1.30	1.20 1.42	<0.001		1.27	1.16 1.40	<0.001	
Pre-dialysis counselling Yes vs. No	3.28	2.95 3.64	<0.001		3.35	3.00 3.74	<0.001	