

Table.1 The Scoring criteria of CCI

Disease	Score
Myocardial infarction	1
Congestive heart failure	1
Chronic lung disease	1
Peptic ulcer	1
dementia	1
Connective tissue disease	1
Mild liver disease	1
Cerebrovascular disease	1
diabetes	1
Peripheral vascular disease	1
hemiplegia	2
Cancer	2
leukemia	2
Moderate-severe renal insufficiency	2
Lymphoma	2
Diabetes with organ damage	2
Moderate-severe liver disease	3
Metastatic solid tumor	6
Acquired immunodeficiency syndrome (AIDS)	6
Total Score	

Table.2 Daily replacement dose of L-T4 in each group

Influencing factors		Patients (n)	Daily L-T4 dose (μg/d)
Gender	Male	194	25.0-125.0[87.5(37.5)]
	Female	323	12.5-125.0[75.0(25.0)]
Menopausal status (female)	Menopause	190	12.5-100.0[75.0(25.0)]
	Not menopause	133	25.0-125.0[75.0(25.0)]
Age(Year)	18-39	96	37.5-125.0[75.0(25.0)]
	40-59	254	37.5-125.0[75.0(25.0)]
	≥60	167	12.5-125.0[50.0(25.0)]
BMI(kg/m2)	≤18.50	16	12.5-100.0[75.0(31.25)]
	18.50-23.99	407	25.0-125.0[75.0(37.5)]
	24.00-27.99	86	25.0-125.0[75.0(37.5)]
	≥28.00	8	25.0-100.0[75.0(37.5)]
FFM(kg)	≤34.99	173	12.5-100.0[75.0(37.5)]
	35.00-44.99	164	25.0-125.0[75.0(25.0)]
	45.00-54.99	157	25.0-125.0[87.5(37.5)]
	≥55.00	23	50.0-125.0[87.5(25.0)]
BSA(m2)	≤1.59	157	12.5-100.0[75.0(25.0)]
	1.60-1.89	323	25.0-125.0[75.0(37.5)]
	≥1.90	37	50.0-125.0[87.5(25.0)]
Etiology	Group 1	183	25.0-125.0[75.0(37.5)]
	Group 2	159	25.0-112.5[75.0(25.0)]
	Group 3	175	12.5-125.0[75.0(37.5)]
CCI Score	0	279	25.0-125.0[75.0(25.0)]
	1	118	25.0-125.0[75.0(37.5)]
	2	72	25.0-125.0[62.5(25.0)]
	3	23	12.5-125.0[50.0(25.0)]
	≥4	25	25.0-87.50[50.0(12.5)]
Dyslipidemia	No	392	25.0-125.0[75.0(37.5)]
	Yes	125	12.5-125.0[75.0(37.5)]

BMI, body mass index; FFM, fat free mass; BSA, body surface area; CCI, Chalson comorbidity index

Table.3 Single factor comparison of L-T4 doses in each group

Influencing factors		Patients(n)	Daily L-T4 dose ($\mu\text{g/kg/d}$)	P
Gender	Male	194	1.29 $\pm$ 0.37	0.49
	Female	323	1.26 $\pm$ 0.41	
Menopausal status (female)	Menopause	190	1.26 $\pm$ 0.42	0.80
	Not menopause	133	1.25 $\pm$ 0.41	
Age(Year)	18-39	96	1.47 $\pm$ 0.31	<0.01
	40-59	254	1.39 $\pm$ 0.34	
	≥ 60	167	0.97 $\pm$ 0.35	
BMI(kg/m²)	≤ 18.50	16	1.76 $\pm$ 0.55	<0.01
	18.50-23.99	407	1.29 $\pm$ 0.37	
	24.00-27.99	86	1.08 $\pm$ 0.39	
	≥ 28.00	8	1.04 $\pm$ 0.40	
FFM(kg)	≤ 34.99	173	1.36 $\pm$ 0.44	<0.01
	35.00-44.99	164	1.16 $\pm$ 0.36	
	45.00-54.99	157	1.29 $\pm$ 0.37	
	≥ 55.00	23	1.21 $\pm$ 0.32	
BSA(m²)	≤ 1.59	157	1.37 $\pm$ 0.44	<0.01
	1.60-1.89	323	1.22 $\pm$ 0.37	
	≥ 1.90	37	1.23 $\pm$ 0.30	
Etiology	Group 1	183	1.40 $\pm$ 0.38	<0.01
	Group 2	159	1.18 $\pm$ 0.36	
	Group 3	175	1.21 $\pm$ 0.41	
CCI Score	0	279	1.35 $\pm$ 0.33	<0.01
	1	118	1.29 $\pm$ 0.41	
	2	72	1.15 $\pm$ 0.49	
	3	23	1.04 $\pm$ 0.43	
	≥ 4	25	0.82 $\pm$ 0.25	
Dyslipidemia	No	392	1.28 $\pm$ 0.38	0.34
	Yes	125	1.24 $\pm$ 0.43	

BMI, body mass index; FFM, fat free mass; BSA, body surface area; CCI, Chalsom comorbidity index

Table 4.The correlation between L-T4 dose and Age, BMI, FFM, BSA respectively

	r	P	R ²	Fitting line equation
Age(Year)	-0.507	0.000	0.257	$Y^a=2.112-0.016*Age$
BMI(kg/m ²)	-0.295	0.000	0.087	$Y^a=2.398-0.051*BMI$
FFM(kg)	-0.066	0.132	0.004	\
BSA(m ²)	-0.149	0.001	0.022	$Y^a=1.959-0.410*BSA$

^a Y is the L-T4 replacement dose (μg/kg/day)

BMI, body mass index; FFM, fat free mass; BSA, body surface area;

Table 5.The influence factors of L-T4 replacement dose

Relevant factor	β	Importance factor	P
Age	-0.381	0.556	0.000
BMI	-0.194	0.152	0.000
Etiology	0.180	0.147	0.000
CCI Score	-0.153	0.146	0.000

BMI, body mass index; CCI, Chalson comorbidity index