

Prognostic Value of the B12/CRP Index in Older Systemically Treatable Cancer Patients

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Table S1. : Comparison of older patients included in the analysis and those excluded for lack of B12 or CRP dosage or lost to follow-up.

	Included (<i>n</i> = 863)		Excluded (<i>n</i> = 311)		<i>p</i> -value
	<i>n</i>	%	<i>n</i>	%	
Gender					
Women	341	39.5	117	37.6	0.557
Men	522	60.5	194	62.4	
Age (years)					
70-74	142	16.5	81	26.0	0.001
75-79	223	25.8	85	27.3	
80-84	257	29.8	81	26.0	
≥85	241	27.9	64	20.6	
Stage IV cancer (<i>n</i> = 1158)	486	57.0	149	51.1	0.014
Cancer type (<i>n</i> = 1174)					
Prostate	184	21.3	42	13.5	0.0001
Thoracic	183	21.2	92	29.6	
Gastrointestinal	131	15.2	42	13.5	
Breast	90	10.4	18	5.8	
Head and neck	67	7.8	34	10.9	
Female reproductive organs	56	6.5	15	4.8	
Urological	50	5.8	25	8.0	
Hematological	51	5.9	11	3.5	
Skin	36	4.2	27	8.7	
Other	15	1.7	5	1.6	
Autonomy (<i>n</i> = 1174)					
Unimpaired ADL-IADL	323	37.4	120	38.6	0.801
Impaired ADL or IADL	224	26.0	74	23.8	
Impaired ADL and IADL	313	36.3	115	37.0	
Cognitive impairment (<i>n</i> = 1137)	538	63.8	187	63.6	0.948
Mood impairment (<i>n</i> = 1149)	391	46.3	147	48.4	0.533
Handgrip Strength ¹ (<i>n</i> = 1137)	470	55.9	176	59.5	0.286
Mobility impairment					
TUG (>20s) (<i>n</i> = 824)	345	41.9	152	50.8	0.007
OLBT (<5s) (<i>n</i> = 766)	504	65.8	242	86.4	0.0001
Gait speed (<0.8m/s) (<i>n</i> = 762)	390	51.2	144	55.4	0.241
Falls ² (<i>n</i> = 862)	155	18.0	65	21.0	0.248
Malnutrition ² (<i>n</i> = 863)	290	33.6	126	40.6	0.026
Polypharmacy ³ (<i>n</i> = 862)	557	64.6	201	64.8	0.944
Severe comorbidities ⁴ (<i>n</i> = 862)	466	54.1	111	35.7	0.0001

Table S2. Oncological treatment proposal for the 863 patients.

Treatments	<i>n</i>	%	Treatments	<i>n</i>	%
Chemotherapy (CT)	584	67.7	Hormonotherapy (HT)	210	24.3
Alone	427	49.5	Alone	47	5.4
Radio-chemo	115	13.3	Radio-HT	139	16.1
Radio-Chemo and hormonotherapy	14	1.6	HT and radio-chemo	14	1.6
CT and/or hormonotherapy (HT)	13	1.5	HT and/or CT	13	1.5
CT and/or targeted therapy (TT)	10	1.2	HT and/or TT	10	1.2
CT and/or Immunotherapy (IT)	5	1.5			
Immunotherapy (IT)	41	4.8	Targeted therapy (TT)	51	5.9
Alone	33	3.8	Alone	38	4.4
IT and/or CT	5	1.5	Radio-TT	3	0.3
IT and/or TT	4	0.5	TT and/or CT	5	1.5
Radio-IT	4	0.5	TT and/or HT	6	0.7
Others	5	0.6	TT and/or IT	4	0.5

Table S3. Association between BCI level and other geriatric characteristics (social isolation, polypharmacy, cognitive disorders, mood impairment, TUG, OLBT, handgrip strength): multinomial logistic regression (Reference group is BCI < 10 000).

		10 000 < BCI ≤ 40 000 (<i>n</i> = 147)			BCI > 40 000 (<i>n</i> = 59)		
<i>MODEL D (n = 853)</i>		aOR	CI95%	<i>p</i> -value	aOR	CI95%	<i>p</i> -value
Gender	Women	1			1		
	Men	1.542	[1.05-2.27]	0.029	1.179	[0.67-2.06]	0.565
Age (years)	70-74	1			1		
	75-79	1.513	[0.81-2.81]	0.192	0.583	[0.24-1.43]	0.237
	80-84	1.485	[0.80-2.75]	0.209	1.184	[0.55-2.55]	0.667
	≥85	1.844	[1.00-3.42]	0.052	0.952	[0.42-2.17]	0.952
Stage	I-III	1			1		
	IV	2.522	[1.74-366]	0.0001	2.696	[0.15-4.71]	0.001
Social isolation	Absent	1			1		
	Present	1.471	[0.92-2.36]	0.109	1.370	[0.68-2.76]	0.379
<i>MODEL E (n = 852)</i>		aOR	CI95%	<i>p</i> -value	aOR	CI95%	<i>p</i> -value
Gender	Women	1			1		
	Men	1.458	[0.99-2.16]	0.058	1.117	[0.64-1.96]	0.700
Age (years)	70-74	1			1		
	75-79	1.415	[0.76-2.65]	0.278	0.549	[0.22-1.35]	0.190
	80-84	1.426	[0.78-2.65]	0.262	1.144	[0.53-2.47]	0.733
	≥85	1.843	[0.99-3.42]	0.053	0.947	[0.42-2.16]	0.896
Stage	I-III	1			1		
	IV	2.415	[1.66-3.51]	0.0001	2.609	[1.50-4.57]	0.001
Polypharmacy¹	< 5 drugs	1			1		
	≥ 5 drugs	2.021	[1.32-3.10]	0.01	1.777	[0.86-3.30]	0.068
<i>MODEL F (n = 833)</i>		aOR	CI95%	<i>p</i> -value	aOR	CI95%	<i>p</i> -value
Gender	Women	1			1		
	Men	1.576	[1.06-2.34]	0.024	1.255	[0.70-2.26]	0.450
Age (years)	70-74	1			1		
	75-79	1.182	[0.62-2.24]	0.607	0.401	[0.15-1.07]	0.067
	80-84	1.381	[0.74-2.58]	0.310	1.107	[0.49-2.48]	0.805
	≥85	1.844	[0.99-3.43]	0.054	0.965	[0.41-2.28]	0.936
Stage	I-III	1			1		
	IV	2.713	[1.85-3.97]	0.0001	2.779	[1.54-5.01]	0.001
Cognitive disorders	Absent	1			1		
	Present	2.034	[1.33-3.10]	0.01	2.990	[1.49-6.01]	0.002
<i>MODEL G (n = 835)</i>		aOR	CI95%	<i>p</i> -value	aOR	CI95%	<i>p</i> -value
Gender	Women	1			1		
	Men	1.648	[1.11-2.16]	0.014	1.360	[0.76-2.45]	0.305

Age (years)	70-74	1			1		
	75-79	1.173	[0.78-2.77]	0.230	0.734	[0.29-1.88]	0.519
	80-84	1.458	[0.78-2.72]	0.237	1.326	[0.58-3.05]	0.507
	≥85	1.874	[1.00-3.50]	0.049	1.209	[0.51-2.89]	0.670
Stage	I-III	1			1		
	IV	2.416	[1.65-3.54]	0.0001	2.476	[1.39-4.41]	0.002
Mood impairment	Absent	1			1		
	Present	2.201	[1.50-3.23]	0.0001	2.171	[1.21-3.88]	0.009
MODEL H (n = 816)		aOR	CI95%	p-value	aOR	CI95%	p-value
Gender	Women	1			1		
	Men	1.628	[1.09-2.42]	0.017	1.274	[0.71-2.28]	0.414
Age (years)	70-74	1			1		
	75-79	1.148	[0.60-2.19]	0.675	0.398	[0.16-2.32]	0.057
	80-84	1.317	[0.70-2.46]	0.388	1.026	[0.45-2.32]	0.951
	≥85	1.711	[0.92-3.20]	0.092	0.851	[0.36-2.04]	0.717
Stage	I-III	1			1		
	IV	2.210	[1.51-3.24]	0.0001	2.051	[1.15-3.66]	0.015
TUG	≤20s	1			1		
	>20s	1.834	[1.24-2.72]	0.002	4.345	[2.34-8.06]	0.0001
MODEL I (n = 758)		aOR	CI95%	p-value	aOR	CI95%	p-value
Gender	Women	1			1		
	Men	1.864	[1.21-2.87]	0.005	1.605	[0.87-2.98]	0.134
Age (years)	70-74	1			1		
	75-79	1.196	[0.60-2.40]	0.615	0.362	[0.14-0.96]	0.040
	80-84	1.351	[0.70-2.63]	0.375	0.754	[0.32-1.75]	0.511
	≥85	1.732	[0.90-3.35]	0.103	0.803	[0.33-1.95]	0.629
Stage	I-III	1			1		
	IV	2.429	[1.62-3.65]	0.0001	2.344	[1.27-4.31]	0.006
OLBT	≥ 5 sec	1			1		
	<5 sec	1.297	[0.82-2.03]	0.257	5.026	[2.05-12.33]	0.0001
MODEL J (n = 831)		aOR	CI95%	p-value	aOR	CI95%	p-value
Gender	Women	1			1		
	Men	1.459	[0.97-2.19]	0.068	1.304	[0.72-2.36]	0.382
Age (years)	70-74	1			1		
	75-79	0.792	[0.40-1.55]	0.494	0.256	[0.09-0.70]	0.008
	80-84	1.069	[0.56-2.03]	0.839	0.861	[0.38-1.97]	0.723
	≥85	1.604	[0.85-3.03]	0.146	0.912	[0.38-2.17]	0.835
Stage	I-III	1			1		
	IV	2.638	[1.78-3.90]	0.0001	2.868	[1.59-5.17]	0.0001
Handgrip strength²	Normal	1			1		
	Impaired	3.414	[2.26-5.17]	0.0001	5.261	[2.79-9.94]	0.0001

BCI: B12/CRP index; TUG: Timed 'Up and Go' test; OLBT: One leg balance test;¹ Polypharmacy define as 5 or more drugs.

² Impaired Handgrip Strength was defined as 27kg / men, 16kg / women.

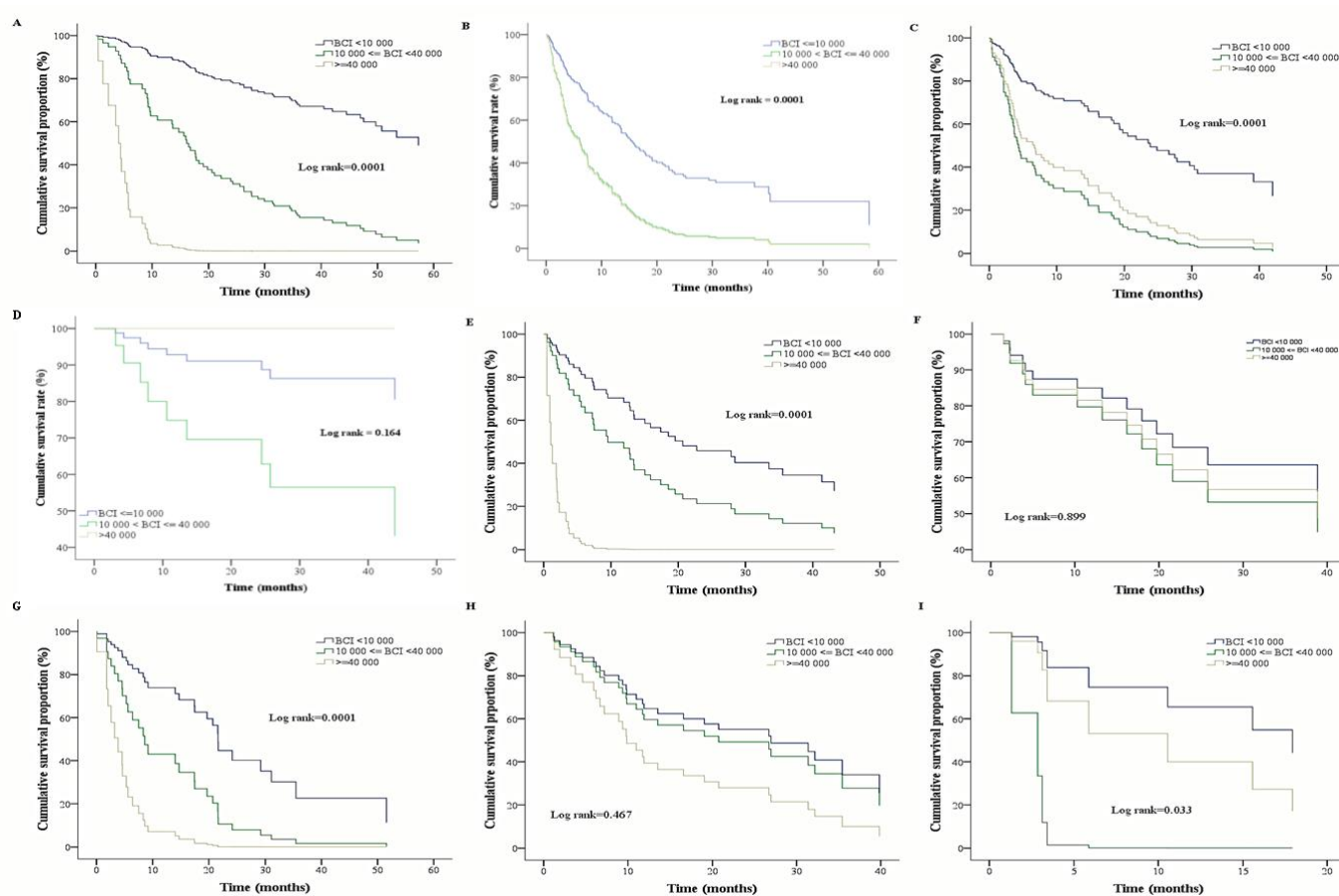


Figure S1. Kaplan Meier analysis, overall survival proportion according to BCI groups for each cancer localization (panel A: prostate; B: thoracic; C: gastro-intestinal; D: breast; E: head and neck; F: female reproductive organs; G: urology (bladder and kidney); H: hematological malignancies; I: skin).