

Supplementary File S1.

Table S1. Concurrent validity of the SNAQ, MUST, MST, MNA-SF and PG-SGA on malnutrition (A) and moderate or risk of malnutrition (B) against the GLIM criteria in patients aged <70 years.

	SNAQ (n=186)		MUST (n=186)		MST (n=186)		MNA-SF (n=186)		PGSGA-SF (n=70)	
	A (≥ 3)	B (≥ 2)	A (≥ 2)	B (≥ 1)	A (≥ 2)	A (≥ 3)	B (≥ 2)	A (≥ 2)	B (≥ 9)	
False positive, n	1	9	3	5	6	3	44	16	22	
False negative, n	25	16	36	12	24	46	13	8	2	
Sensitivity, %	66	78	51	84	68	38	82	70	93	
Specificity, %	99	92	97	96	95	97	61	63	49	
PPV, %	98	87	93	93	89	90	58	54	53	
NPV, %	82	87	85	90	82	70	84	77	91	
Cohen's Kappa	0.69	0.72	0.53	0.81	0.65	0.39	0.40	0.31	0.36	
McNemar	p<0.001	p=0.230	p<0.001	p=0.143	p=0.003	p<0.001	p<0.001	p=0.152	p<0.001	

A: malnutrition (cut-off point); B: moderate or risk of malnutrition (cut-off point); PPV: Positive Predictive Value; NPV: Negative Predictive value; SNAQ: Short Nutritional Assessment Questionnaire; MUST: Malnutrition Universal Screening Tool; MST: Malnutrition Screening Tool; MNA-SF: Mini Nutritional Assessment – Short Form; PG-SGA-SF: Patient Generated – Subjective Global Assessment – Short Form; GLIM: Global Leadership Initiative on Malnutrition

Table S2. Concurrent validity of the SNAQ, MUST, MST, MNA-SF and PG-SGA on malnutrition (A) and moderate or risk of malnutrition (B) against the GLIM criteria in patients aged ≥ 70 years.

	SNAQ (n=170)		MUST (n=170)		MST (n=170)		MNA-SF (n=170)		PGSGA-SF (n=56)	
	A (≥ 3)	B (≥ 2)	A (≥ 2)	B (≥ 1)	A (≥ 2)	A (≤ 7)	B (≤ 11)	A (≥ 9)	B (≥ 9)	
False positive, n	4	8	4	6	10	2	35	11	16	
False negative, n	40	34	53	20	29	55	8	10	4	
Sensitivity, %	46	54	27	73	61	26	89	66	86	
Specificity, %	96	92	96	94	90	98	64	59	41	
PPV, %	90	83	83	90	82	91	65	63	61	
NPV, %	70	72	63	82	75	63	88	62	73	
Cohen's Kappa	0.44	0.48	0.25	0.68	0.52	0.26	0.51	0.25	0.27	
McNemar	p<0.001	p<0.001	p<0.001	p=0.009	p=0.003	p<0.001	p<0.001	p=1.000	p=0.012	

A: malnutrition (cut-off point); B: moderate or risk of malnutrition (cut-off point); PPV: Positive Predictive Value; NPV: Negative Predictive value; SNAQ: Short Nutritional Assessment Questionnaire; MUST: Malnutrition Universal Screening Tool; MST: Malnutrition Screening Tool; MNA-SF: Mini Nutritional Assessment – Short Form; PG-SGA-SF: Patient Generated – Subjective Global Assessment – Short Form; GLIM: Global Leadership Initiative on Malnutrition

Supplementary File S2. Prevalence of malnutrition and concurrent validity of screening tools against the GLIM criteria based on the Appendicular Skeletal Mass Index (ASMI) (Table 1 and 2) or Skeletal Mass Index (SMI) (Table 3 and 4) threshold for low muscle mass.

Table S3. Prevalence of confirmed malnutrition based on the Appendicular Skeletal Mass Index (ASMI) threshold.

	n	Positive result, n (%)
GLIM	356	187 (53)
<i>Phenotypic criteria</i>	356	197 (55)
Weight loss	356	113 (32)
Low BMI	356	59 (17)
Low muscle mass	356	151 (42)
<i>Etiologic criteria</i>	356	330 (93)
Reduced intake	356	251 (71)
Inflammation	356	294 (83)

Table S4. Concurrent validity of the SNAQ, MUST, MST, MNA-SF and PG-SGA against the GLIM criteria based on Appendicular Skeletal Mass Index (ASMI) threshold.

	SNAQ (n=356)		MUST (n=355)		MST (n=356)		MNA-SF (n=356)		PGSGA-SF (n=126)	
	A (≥ 3)	B (≥ 2)	A (≥ 2)	B (≥ 1)	A (≥ 2)	A (≥ 3)	B (≥ 2)	A (≥ 2)	B (≥ 1)	
False positive, n	3	10	6	10	12	5	62	21	31	
False negative, n	102	82	127	70	88	140	43	21	8	
Sensitivity, %	46	56	32	62	53	25	77	68	88	
Specificity, %	98	94	96	69	93	97	63	66	49	
PPV, %	97	91	91	92	89	90	70	68	65	
NPV, %	62	66	56	69	64	54	71	76	79	
Cohen's Kappa	0.43	0.49g	0.27	0.56	0.45	0.21	0.41	0.33	0.37	
McNemar	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p=0.078	p=0.233	p<0.001	

A: malnutrition (cut-off point); B: risk of/moderate malnutrition (cut-off point); PPV: Positive Predictive Value; NPV: Negative Predictive value; SNAQ: Short Nutritional Assessment Questionnaire; MUST: Malnutrition Universal Screening Tool; MST: Malnutrition Screening Tool; MNA-SF: Mini Nutritional Assessment – Short Form; PG-SGA-SF: Patient Generated – Subjective Global Assessment – Short Form; GLIM: Global Leadership Initiative on Malnutrition

Table S5. Prevalence of malnutrition based on the Skeletal Mass Index (SMI) threshold.

	n	Positive result, n (%)
GLIM	356	148 (44)
<i>Phenotypic criteria</i>	356	163 (46)
Weight loss	356	113 (32)
Low BMI	356	59 (17)
Low muscle mass	356	77 (22)
<i>Etiologic criteria</i>	356	330 (93)
Reduced intake	356	251 (71)
Inflammation	356	294 (83)

Table S6. Concurrent validity of the SNAQ, MUST, MST, MNA-SF and PG-SGA against the GLIM criteria based on Skeletal Mass Index (SMI) threshold.

	SNAQ (n=356)		MUST (n=355)		MST (n=356)		MNA-SF (n=356)		PGSGA-SF (n=126)	
	A (≥ 3)	B (≥ 2)	A (≥ 2)	B (≥ 1)	A (≥ 2)	A (≥ 3)	B (≥ 2)	A (≥ 2)	B (≥ 1)	
False positive, n	4	15	7	11	17	6	75	26	37	
False negative, n	72	56	97	40	62	110	25	19	7	
Sensitivity, %	54	64	37	74	60	30	84	67	88	

Specificity, %	98	93	97	95	92	97	63	62	46
PPV, %	96	87	89	91	85	89	64	60	58
NPV, %	73	77	67	83	75	64	83	69	82
Cohen's Kappa	0.55	0.58	0.36	0.70	0.54	0.29	0.45	0.29	0.32
McNemar	p<0.001	p<0.001	p<0.001	p<0.001	p<0.001	p=1.000	p<0.001	p=0.371	p<0.001

A: malnutrition (cut-off point); B: risk of/moderate malnutrition (cut-off point); PPV: Positive Predictive Value; NPV: Negative Predictive value; SNAQ: Short Nutritional Assessment Questionnaire; MUST: Malnutrition Universal Screening Tool; MST: Malnutrition Screening Tool; MNA-SF: Mini Nutritional Assessment – Short Form; PG-SGA-SF: Patient Generated – Subjective Global Assessment – Short Form; GLIM: Global Leadership Initiative on Malnutrition