

SUPPLEMENTARY TABLES

Supplementary Table S1: Baseline characteristics of patients from 1st data set

Patients' characteristics		Number (%)	
Age, years	Median (range)	59 (26–84)	
Gender	Male	216 (62.6%)	
	Female	129 (37.4%)	
Baseline laboratory findings at diagnosis	Hemoglobin (g/dL)	13.18 ± 1.95	
	MCV (fL)	89.67 ± 6.81	
	Hemoglobin ≤11 g/dL, number (%)	49 (14.2%)	
Disease	Gastric cancer	101 (29.3%)	
	Colorectal cancer	69 (20.0%)	
	Hepatocellular carcinoma	23 (6.7%)	
	Lung cancer	152 (44.1%)	
First line treatment	Treatment modality other than surgery	Chemotherapy	215 (62.3%)
		Chemo-radiation	75 (21.7%)
		Target agents	55 (15.9%)
Purpose of the treatment	Purpose of the treatment	Neoadjuvant	6 (1.7%)
		Adjuvant	170 (49.3%)
		Definitive	15 (4.3%)
		Palliative	154 (44.6%)

Supplementary Table S2: Baseline characteristics of patients from 2nd data set

Patients' characteristics		Number (%)
Age, years	Median (IQR, range)	58 (15, 27–82)
Gender	Male	27 (69.2%)
	Female	12 (30.8%)
Disease	Gastric cancer	11 (28.2%)
	Biliary tract cancer	6 (15.4%)
	Lung cancer	18 (46.2%)
	Lymphoma	4 (10.3%)
Metastasis**	Yes	31 (88.6%)
	No	4 (11.4%)
Chemotherapy within 6 months	Yes	26 (66.7%)
	No	13 (33.3%)
Hemoglobin (g/dL)	Median (IQR)	9.5 (6.2)
MCV (fL)	Mean± SD	92.2 ± 1.3

Abbreviates: MCV, mean corpuscular volume; SD, standard deviation; IQR, interquartile range

**Lymphoma patients ($n = 4$) were excluded from the analysis

Supplementary Table S3: Biochemical parameters in cancer patients

				General population	Population in this study
Ferritin, ng/mL	Women	Mean	Premenopausal	53	224.7 ± 78.3*
			Post-menopausal	105	
		Range	Premenopausal	6–180	7.5–930.9
			Post-menopausal	8–350	
	Men	Mean		175	240.7 ± 36.1*
		Range		20–400	2.1–611.9
sTfR, ug/mL	Mean			0.854	1.03 ± 0.09
	Range			0.072–1.699	0.36–2.63
CRP, mg/L	Mean			–	14.73 ± 4.10
	Median			–	3.42 (13.95**)
	Range			0.068–8.2	0.01–100.00
Hepcidin, ng/mL	Mean			10.1	12.50 ± 1.78*
	Median			7.2	9.52 (16.18**, 1.19–50.33)

*Standard deviation (SD)

**Interquartile range (IQR)

Supplementary Table S4: Correlation between conventional iron parameters and cancer anemia related parameters

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			No anemia (<i>n</i> = 18)	Anemia (<i>n</i> = 21)	<i>p</i> -value
Biochemical parameters	Ferritin, ng/mL	Median (IQR)	166.7 ± 29.7	295.0 ± 55.5	0.050
	Iron	67.31+/-8.39 55.00 (74, 9-156)	89.5 (59, 37-139)	37 (62, 9-156)	0.024
	TIBC	275.0 (136, 164-435)	322.5 (114, 225-386)	266 (184, 164-435)	0.352
	TS	25.30 (20.2, 2.8-43.7)	29.6 (12.8, 15.6-40.6)	14.3 (24.7, 2.8-43.7)	0.069

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		Ferritin		sTfR		CRP		Hepcidin		Hemoglobin	
		<i>r</i>	<i>p</i> -value	<i>r</i>	<i>p</i> -value	<i>r</i>	<i>p</i> -value	<i>r</i>	<i>p</i> -value	<i>r</i>	<i>p</i> -value
Conventional iron parameters	Iron	-	0.951	-	0.063	-0.559	0.002	-	0.822	0.437	0.018
	TIBC	-0.698	<0.000	-	0.289	-0.497	0.006	-0.654	<0.001	-	0.696
	TS	-	0.179	-	0.187	-0.441	0.017	-	0.189	0.400	0.031