

Table 1 Performance of each assay by ROC curve analyses.

	Sensitivity [95% CI]	Specificity [95% CI]	AUC [95% CI]
F-MDA	74.7% [72.67-92.36]	83.9% [67.58-80.98]	0.819 [0.76-0.87]
B-MDA	94.3% [89.68-97.21]	100% [93.56-100.00]	0.981 [0.95-0.99]
d-ROMs	72.8% [65.56-79.30]	100% [93.56-100.00]	0.874 [0.82-0.91]
TAC	52.0% [40.93-62.26]	92.9% [88.06-96.99]	0.668 [0.60-0.73]

T-MDA: Sensitivity 100%, Specificity 100%, AUC 1.000 [0.984-1.000].

Sensitivity: true positive values. Specificity: true negative values.

AUC: area under the ROC curve. [95% CI]: 95% confidence intervals.

F-MDA, free MDA (both measured by ID-GC-MS technique);

B-MDA, bound MDA (calculated as the difference between the T- and F-MDA amounts);

d-ROMs, Reactive Oxygen Metabolites; TAC, Total Antioxidant Capacity (both measured by two commercial assays).

Table 2 Pairwise Spearman correlations among markers and the corresponding 95% Confidence Intervals.

	r	p	95% CI
T-MDA vs B-MDA	0.97	0.000	+ 0.96/+ 0.98
T-MDA vs F-MDA	0.29	0.000	+ 0.18/+ 0.40
T-MDA vs d-ROMs	0.55	0.000	+ 0.46/+ 0.63
T-MDA vs TAC	- 0.07	0.43	- 0.16/+ 0.05
B-MDA vs F-MDA	0.14	0.000	+ 0.02/+ 0.25
B-MDA vs d-ROMs	0.57	0.000	+ 0.48/+ 0.65
B-MDA vs TAC	- 0.06	0.17	- 0.15/+ 0.07
F-MDA vs d-ROMs	0.19	0.000	+ 0.05/+ 0.32
F-MDA vs TAC	- 0.17	0.009	- 0.30/ - 0.03
d-ROMs vs TAC	0.02	0.77	- 0.08/+ 0.14

r: Spearman correlation coefficient; p: probability of true association between the variables;

95% CI: 95% confidence intervals.

T-MDA, total MDA and F-MDA, free MDA (both measured by ID-GC-MS technique);

B-MDA, bound MDA (calculated as the difference between the T- and F-MDA amounts);

d-ROMs, Reactive Oxygen Metabolites; TAC, Total Antioxidant Capacity (both measured by two commercial assays).