Elevated circulatory proline-to-glutamine ratio (PQR) in endometriosis and its potential as a diagnostic biomarker

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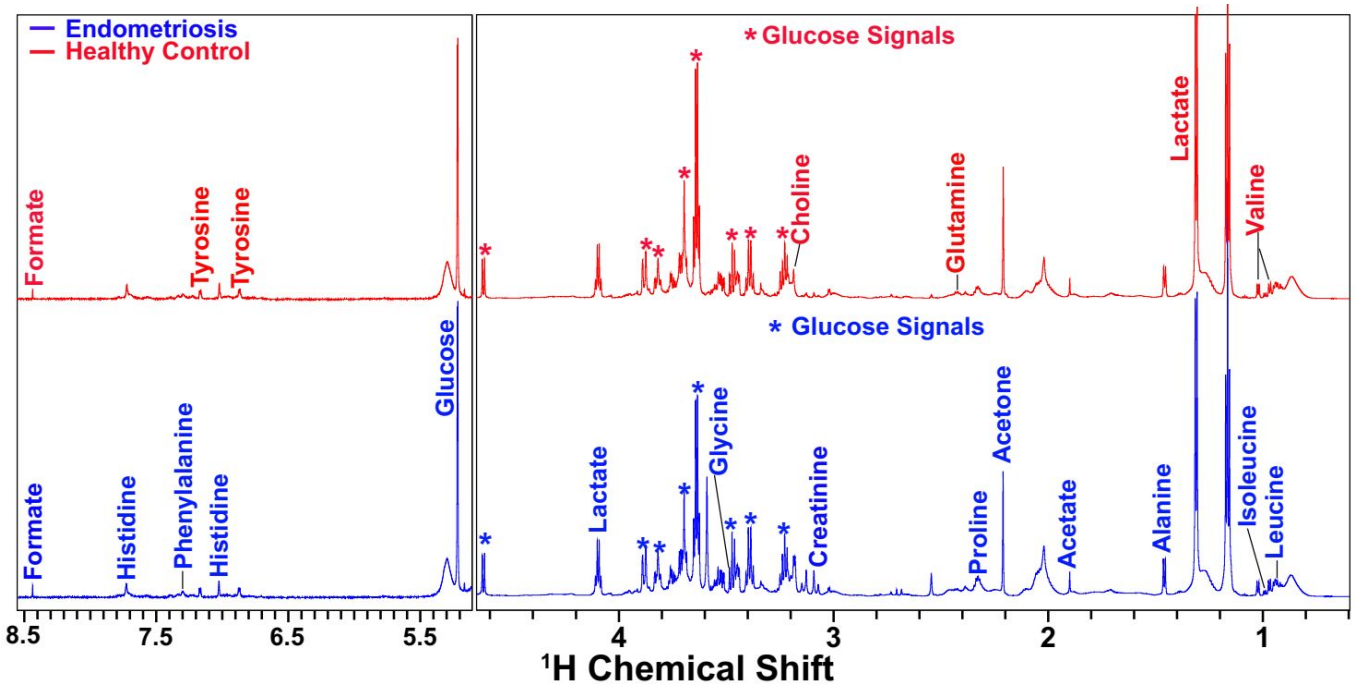
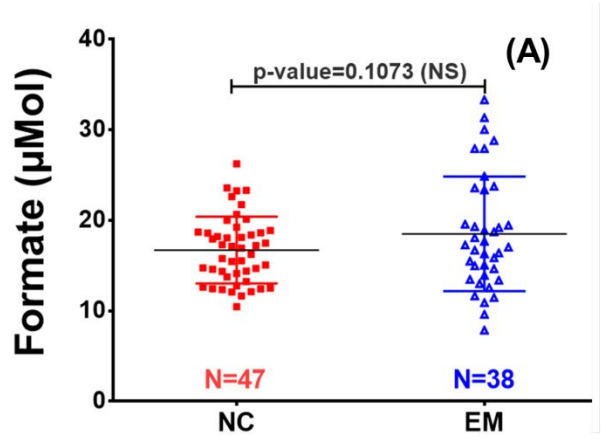
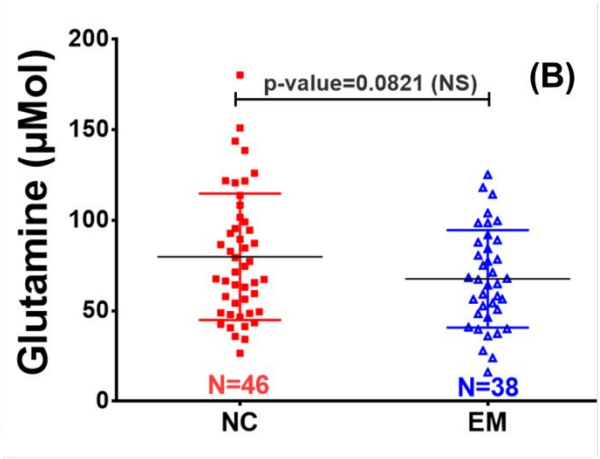
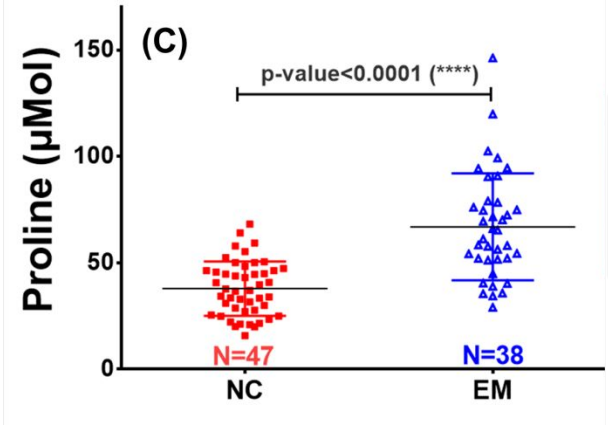


Figure S1: The cumulative 1D ^{1}H CPMG NMR spectra of serum samples of endometriosis (EM, in blue) and normal control (NC, in Red) study groups showing the metabolite specific assignment of NMR peaks.

Figure S2: Box plots showing comparison of circulatory levels of formate (A), glutamine (B) and proline (C) between NC and EM subjects. These concentration levels have been estimated with respect to trimethyl peak of TSP (trimethylsilylpropionic acid-d4) at 0.00 ppm calibrated at 100 µM in the commercial software CHENOMX. (D) The table showing estimated serum levels of metabolites in mean± SEM (i.e. standard error in mean).







(D)

Mean ± SEM	NC	EM (N=38)	P-value
Formate	16.72 ± 0.54 (N=47)	18.51 ± 1.02 (N=38)	0.1073 (NS)
Glutamine	79.84 ± 5.14 (N=46)	67.68 ± 4.36 (N=38)	0.0821 (NS)
Proline	37.88 ± 1.86 (N=47)	66.88 ± 4.07 (N=38)	<0.0001 (****)

Figure S3: The stacking (A) and overlay (B) of cumulative 1D ^{1}H CPMG NMR spectra of serum samples of endometriosis (EM, in red) and normal control (NC, in blue) showing the labelling of peaks of formate and TSP. Spectral region of trimethyl peak of TSP (trimethylsilylpropionic acid-d4) at 0.00 ppm (C) and that of formate signal (D) zoomed for visual comparison between NC and EM subjects.