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Table S2. Percentage of coefficient of variation (% CV) of each metabolite analyzed, using a pool of samples as quality control validation sample (QC_val). CTL: control or healthy individuals; AD: adenoma patients, and CRC: colorectal cancer patients.

	ChoE(18:1)	ChoE(18:2)	ChoE(20:4)	PE(16:0/18:1)	SM(d18:1/23:0)	SM(42:3)	TG(54:1)
poolCTL	10%	22%	24%	20%	9%	18%	13%
poolAD	7%	29%	14%	18%	12%	16%	16%
poolCRC	13%	21%	40%	19%	8%	11%	9%

Table S3. Percentage of coefficient of variation (% CV) of each metabolite analyzed, using a commercial reference serum as a quality control calibration sample (QC_cal). CTL: control or healthy individuals; AD: adenoma patients, and CRC: colorectal cancer patients.

	ChoE(18:1)	ChoE(18:2)	ChoE(20:4)	PE(16:0/18:1)	SM(d18:1/23:0)	SM(42:3)	TG(54:1)
poolCTL	10%	24%	21%	14%	11%	19%	18%
poolAD	8%	28%	6%	7%	11%	15%	11%
poolCRC	12%	22%	41%	11%	8%	12%	19%
QC_val	3%	5%	8%	5%	4%	5%	4%

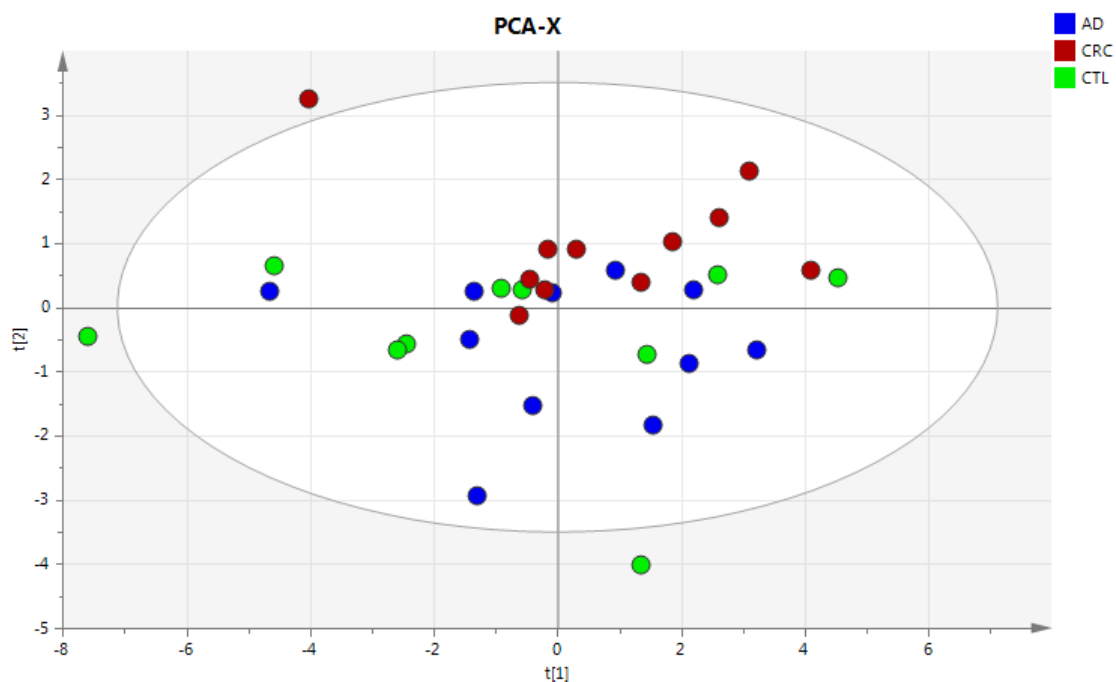


Figure S1. PCA-X scores plot obtained for the three studied groups ($R^2 = 0.612$, and $Q^2 = 0.374$) and colored by class of Batch 2. CTL - control; AD – adenoma, and CRC – colorectal cancer individuals. Scaling and transformation were autoscaled and logarithm.

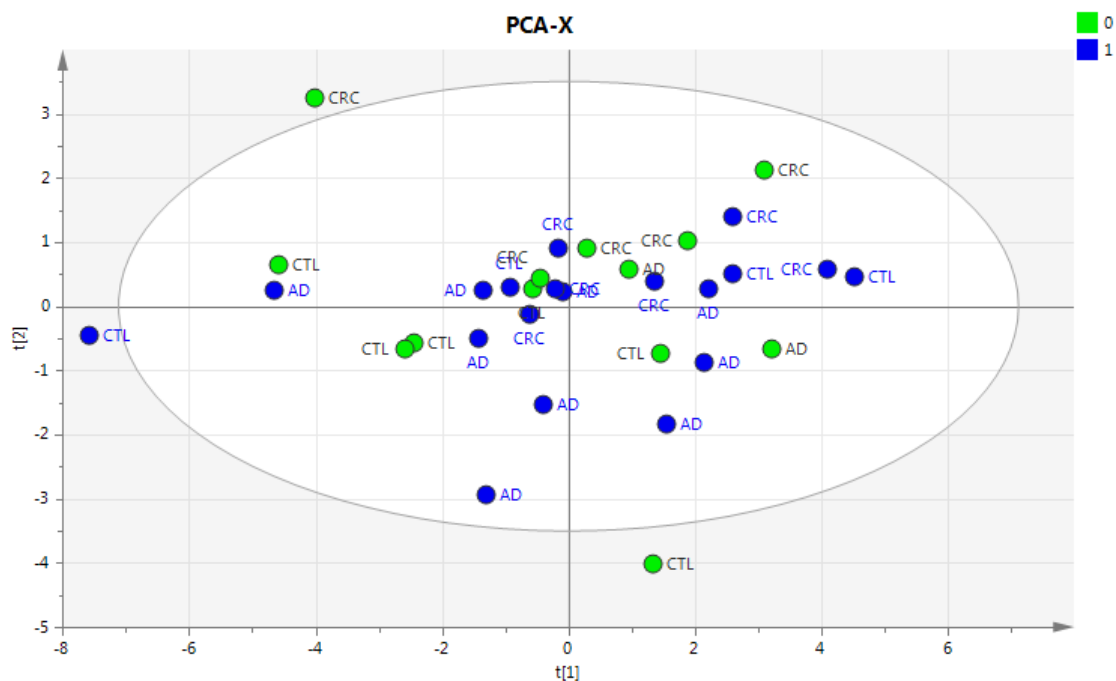


Figure S2. PCA-X scores plot obtained for the three studied groups ($R^2 = 0.612$, and $Q^2 = 0.374$) and colored by gender. 0 – female, and 1 – male individuals. Scaling and transformation were autoscaled and logarithm.

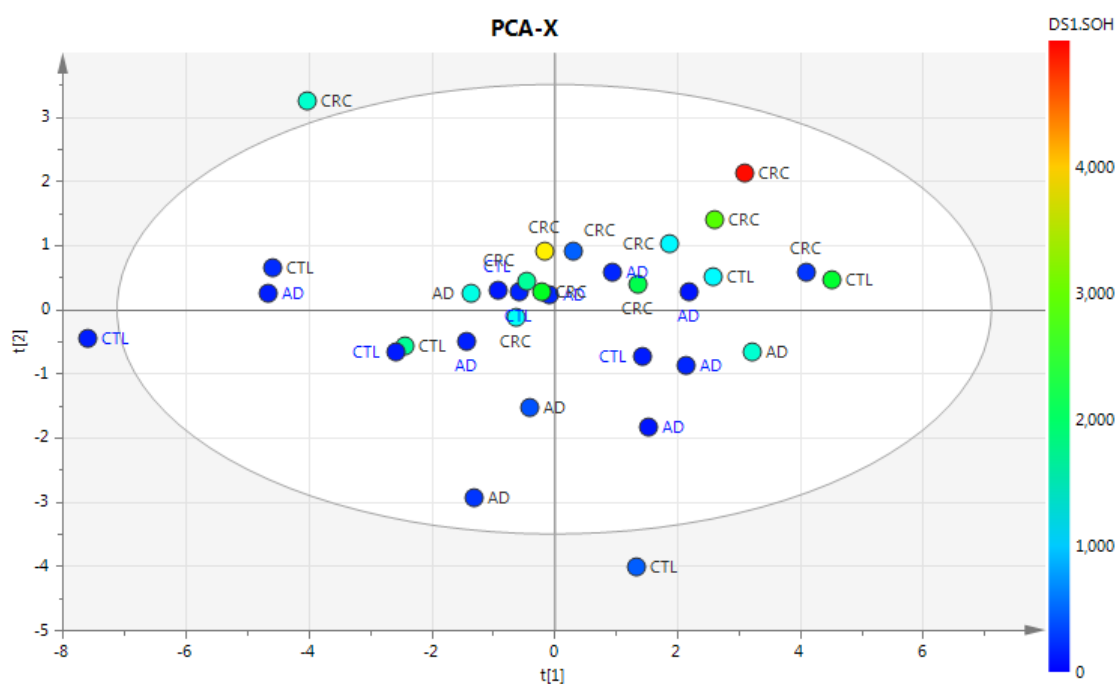


Figure S3. PCA-X scores plot obtained for the three studied groups ($R^2 = 0.612$, and $Q^2 = 0.374$) and colored by fecal occult blood. Scaling and transformation were autoscaled and logarithm.

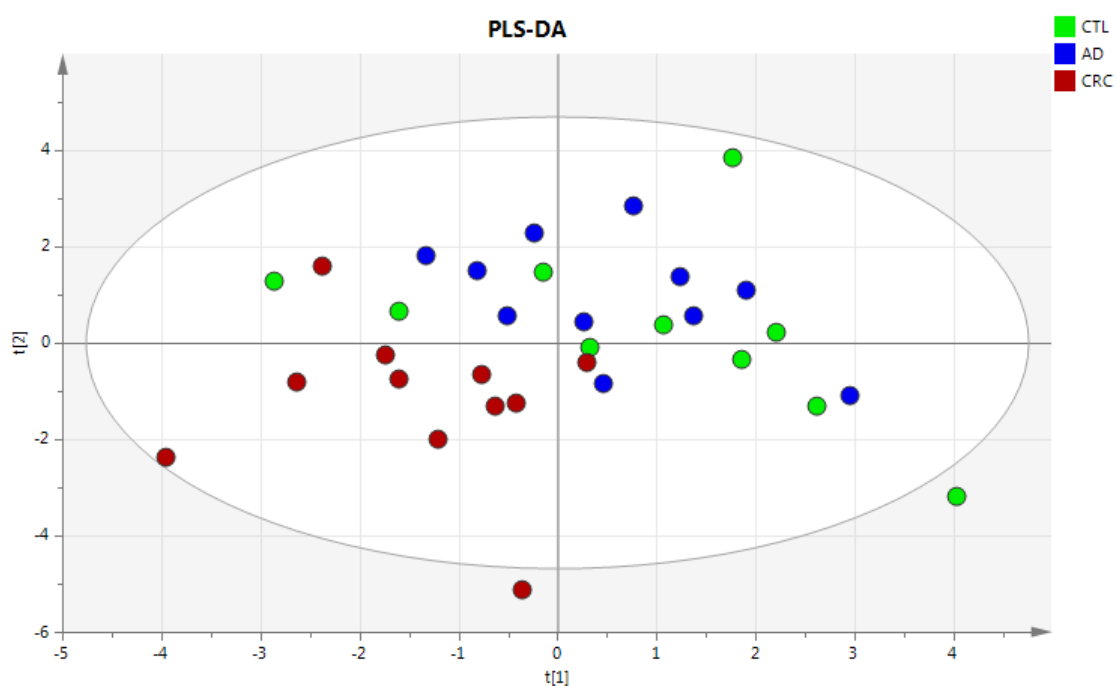


Figure S4. PLS-DA scores plot obtained for the three studied groups ($R^2 = 0.302$, and $Q^2 = 0.149$). CTL - control; AD – adenoma, and CRC – colorectal cancer individuals. Scaling and transformation were autoscaled and logarithm.

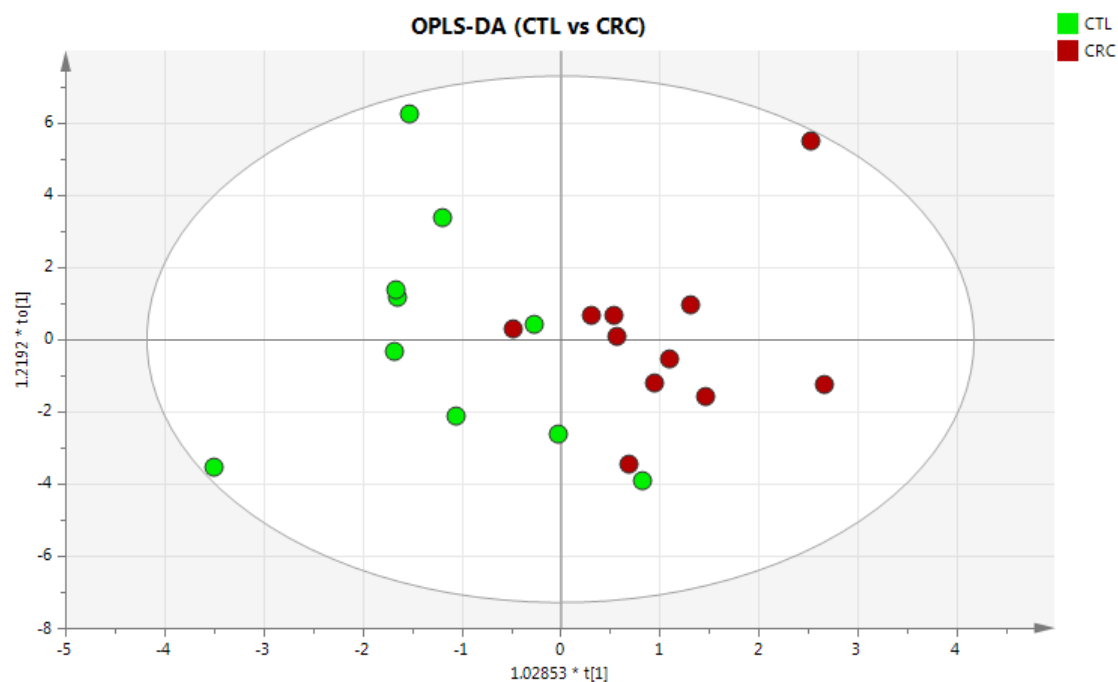


Figure S5. OPLS-DA scores plot obtained for control individuals (CTL) and colorectal cancer patients (CRC) groups ($R^2 = 0.554$, and $Q^2 = 0.276$; CV-ANOVA p -value = 0.2431). CTL – control individuals, and CRC – colorectal cancer patients. Scaling and transformation were autoscaled and logarithm.

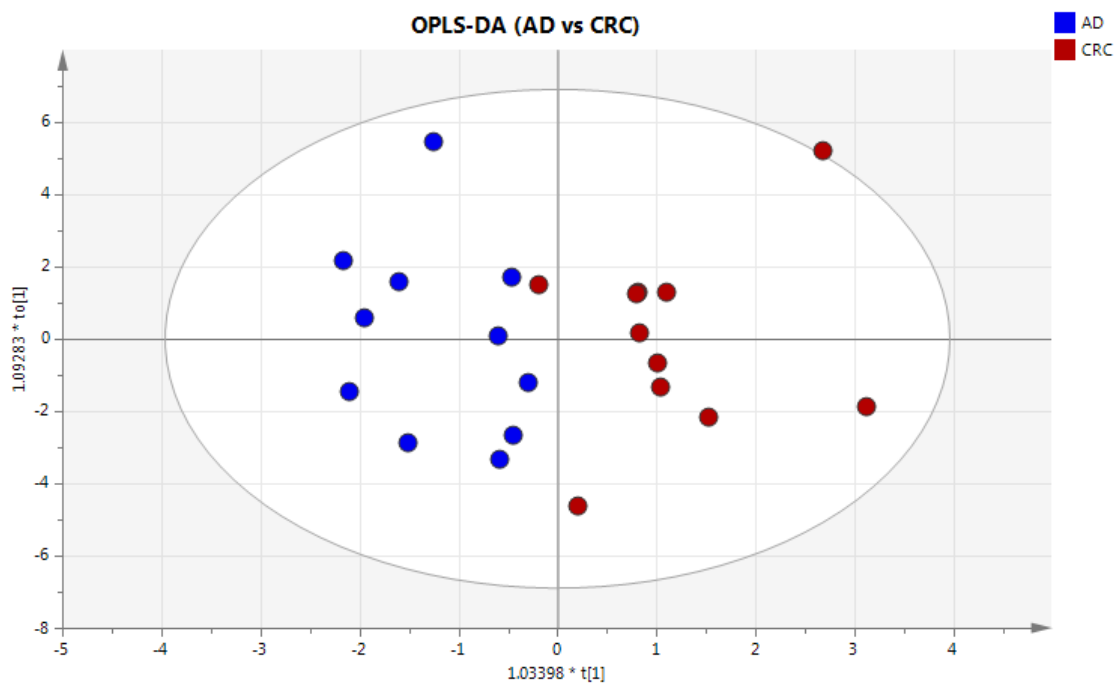


Figure S6. OPLS-DA scores plot obtained for adenocarcinoma (AS) and colorectal cancer (CRC) groups ($R^2 = 0.675$, and $Q^2 = 0.296$; CV-ANOVA p -value = 0.1778). AD – adenoma, and CRC – colorectal cancer patients. Scaling and transformation were autoscaled and logarithm.

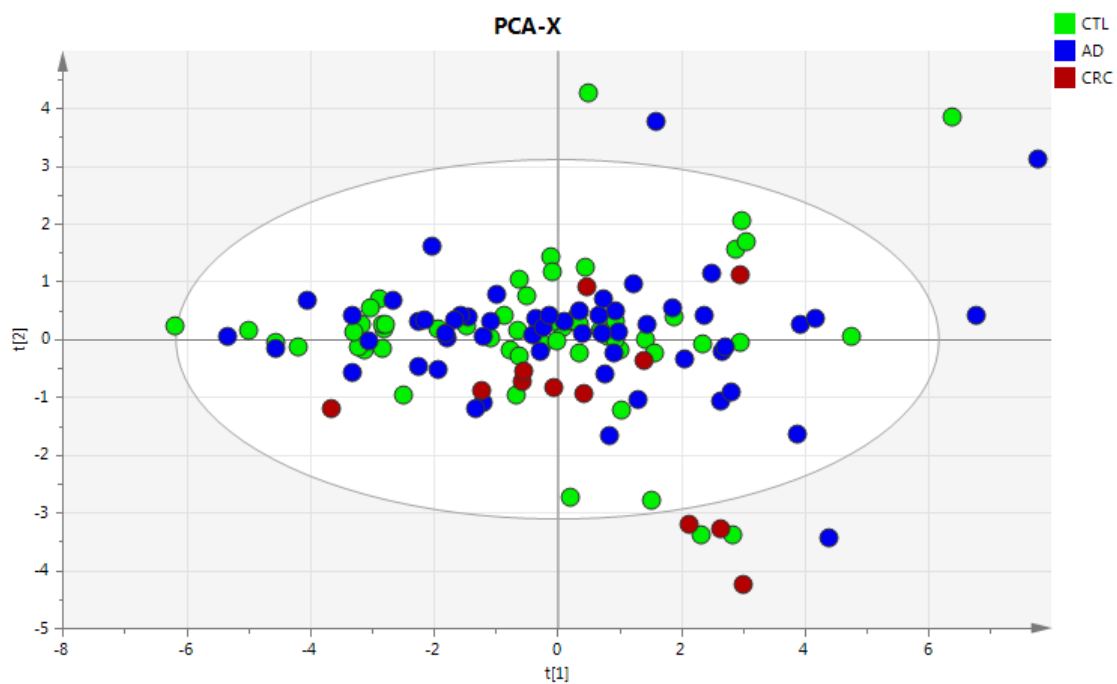


Figure S7. PCA-X scores plot obtained for the three studied groups ($R^2 = 0.482$, and $Q^2 = 0.23$) when fusing Batch 2 and Batch 3 studies. CTL - control; AD – adenoma, and CRC – colorectal cancer individuals. Scaling and transformation were autoscaled and logarithm.