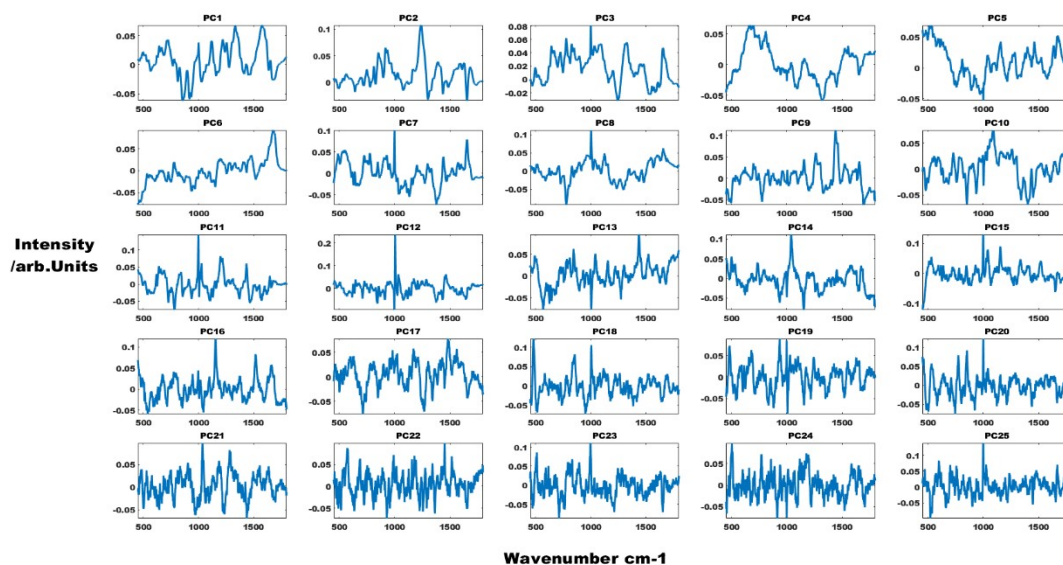


Ovarian Tissue

Cancer vs Benign

a)



b)

Principal Component	F value ($F_{crit} 10.8, p=0.001$)
1	859
4	160
5	110
3	85
12	77
2	69
9	56
13	54
15	33
11	24
23	26
19	14
20	12

c)

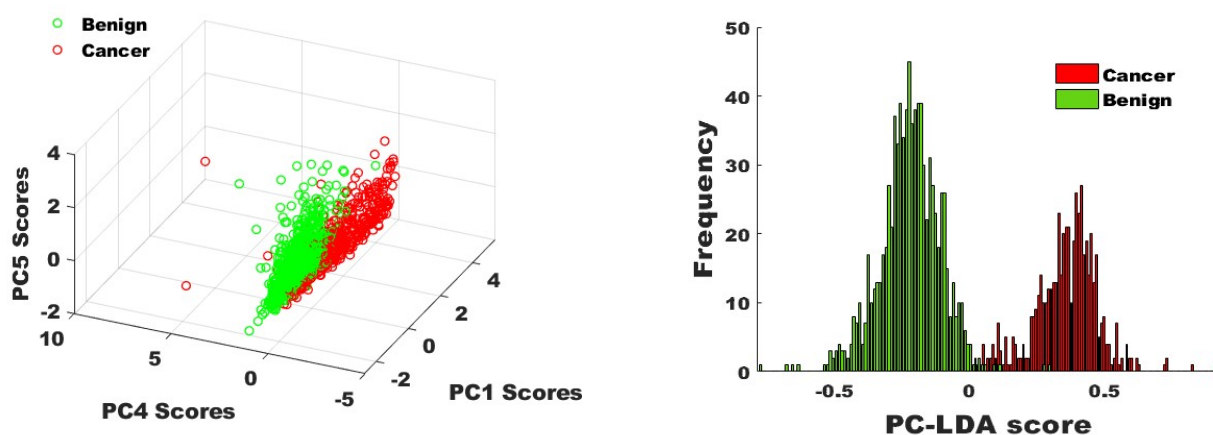
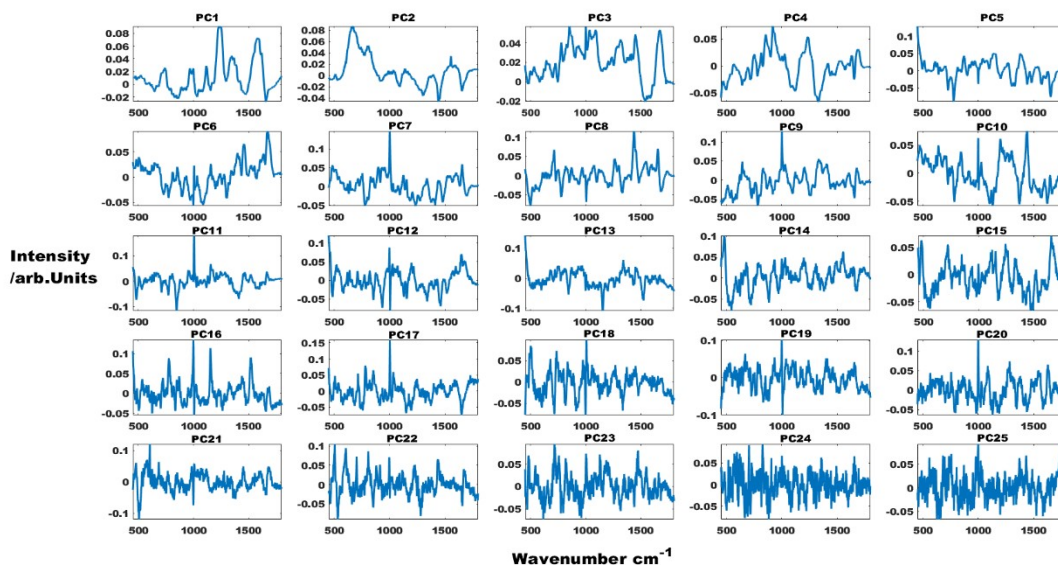


Figure S1 – Principal component analysis of cancer and benign ovarian spectra. a) The loadings of the 25 principal components generated from the dataset. b) Summary of PCs with an F value greater than F_{crit} on analysis of variance (ANOVA), with a p value of 0.001 for the significance of the test. c) PCA scores plot.

Ovarian Tissue

Cancer vs Borderline

a)



b)

Principal Component	F value ($F_{crit} 11, p=0.001$)
11	163
6	157
1	133
10	88
2	86
9	63
12	57
17	55
19	31
5	23
3	16

c)

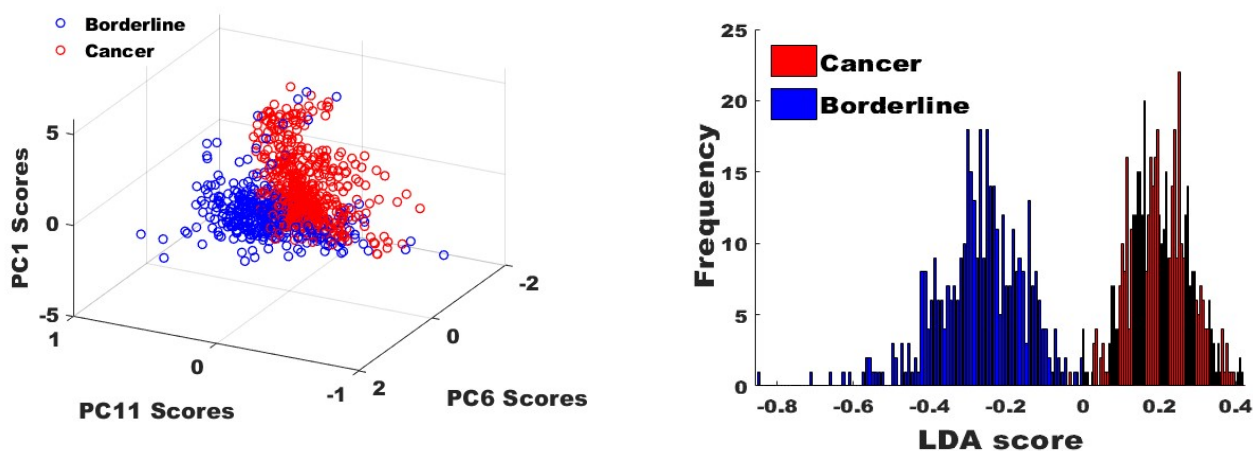
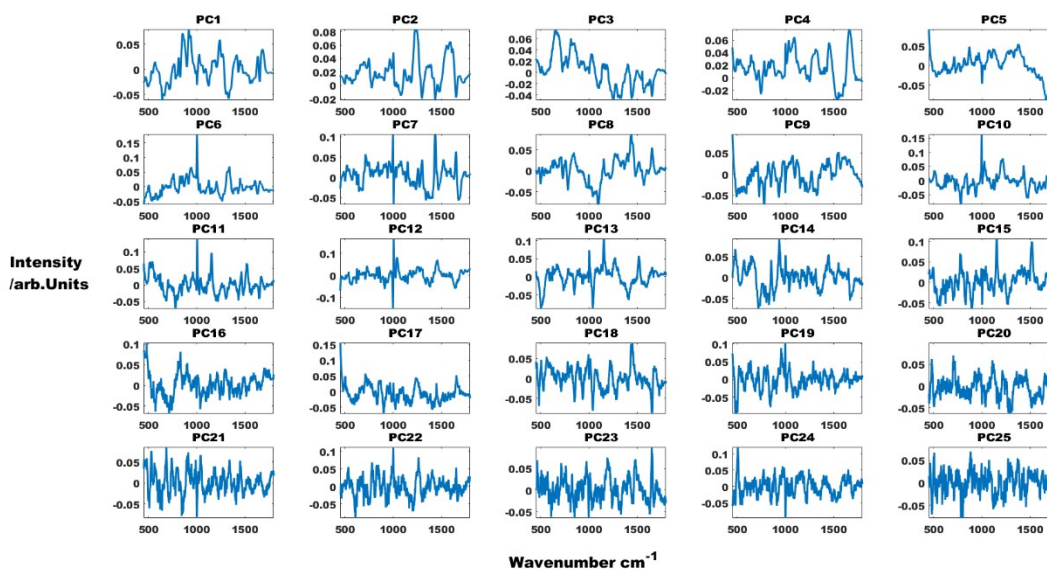


Figure S2 – Principal component analysis of cancer and borderline ovarian spectra. a) The loadings of the 25 principal components generated from the dataset. b) Summary of PCs with an F value greater than F_{crit} on analysis of variance (ANOVA), with a p value of 0.001 for the significance of the test. c) PCA scores plot and histogram.

Ovarian Tissue

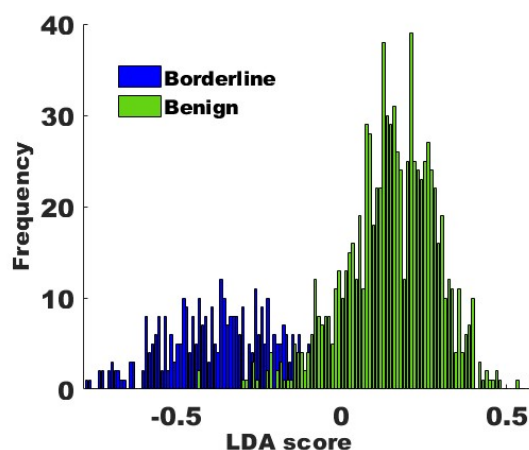
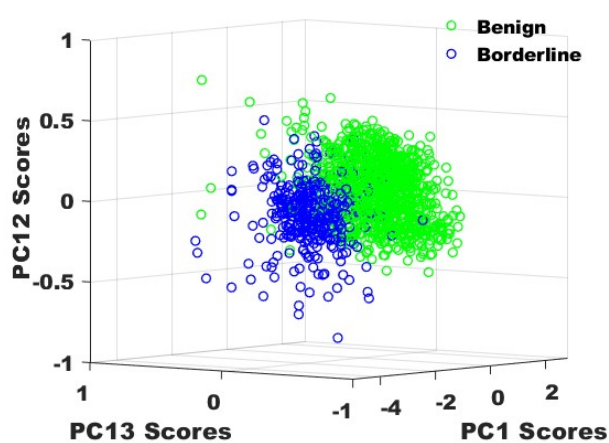
Borderline vs Benign

a)



b)

Principal Component	F value ($F_{crit} 11, p=0.001$)
1	751
13	133
12	93
7	57
6	56
14	33
24	23
23	17
15	13



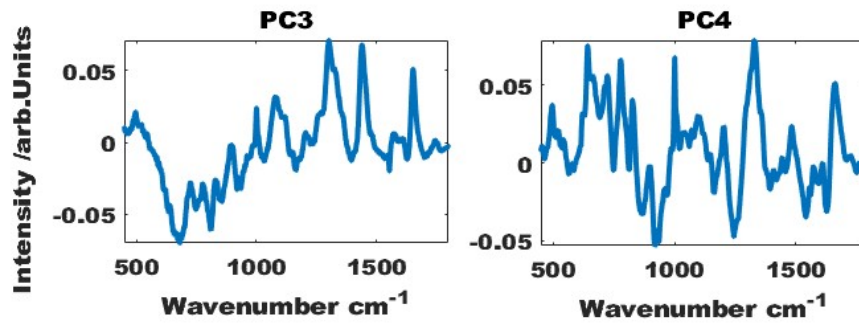
c)

Figure S3 – Principal component analysis of borderline and benign ovarian spectra. a) The loadings of the 25 principal components generated from the dataset. b) Summary of PCs with an F value greater than F_{crit} on analysis of variance (ANOVA), with a p value of 0.001 for the significance of the test. c) PCA scores plot and histogram.

Peritoneal Tissue

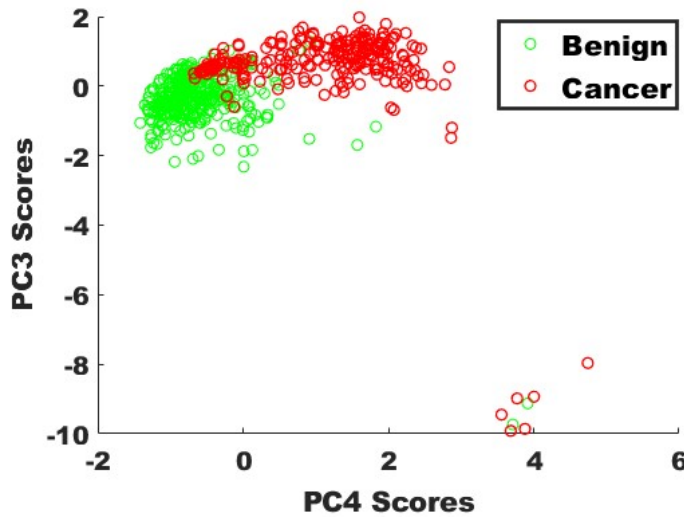
Cancer vs Benign (Primary Surgery)

a)



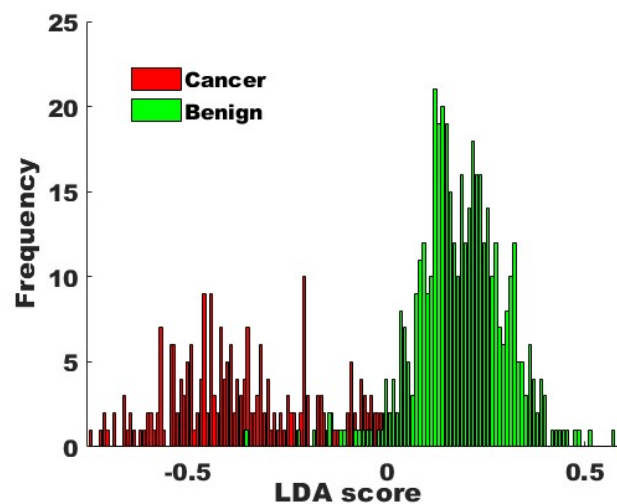
b)

Principal Component	F value ($F_{\text{crit}} 10.9, p=0.001$)
4	964
3	72



c)

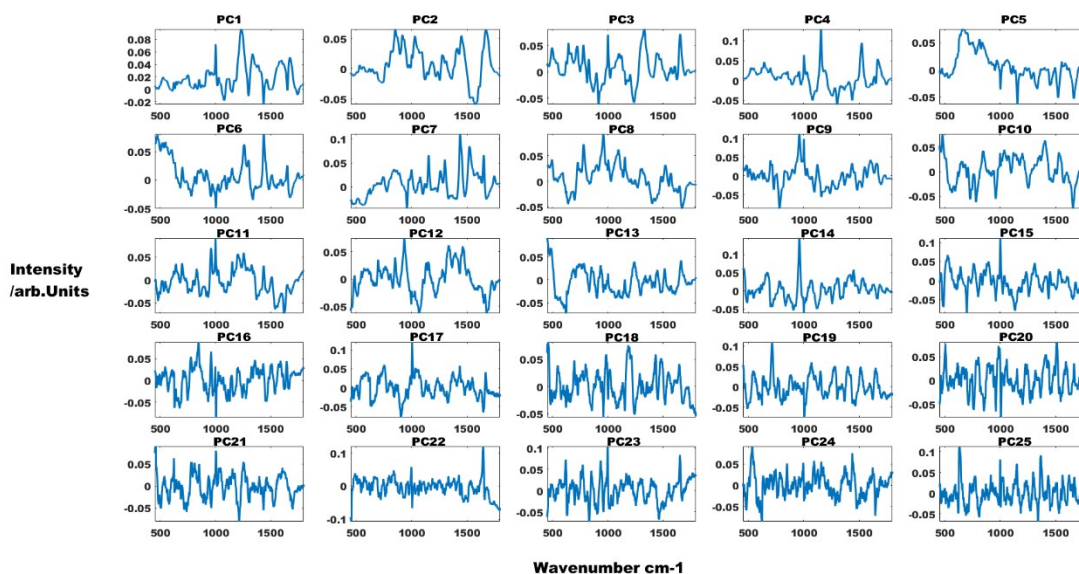
Figure S4 – Principal component loadings for the two PCs of significance on analysis of variance (ANOVA) for cancer vs benign (primary surgery) peritoneal spectra. C) PCA scores plot and histogram.



Peritoneal Tissue

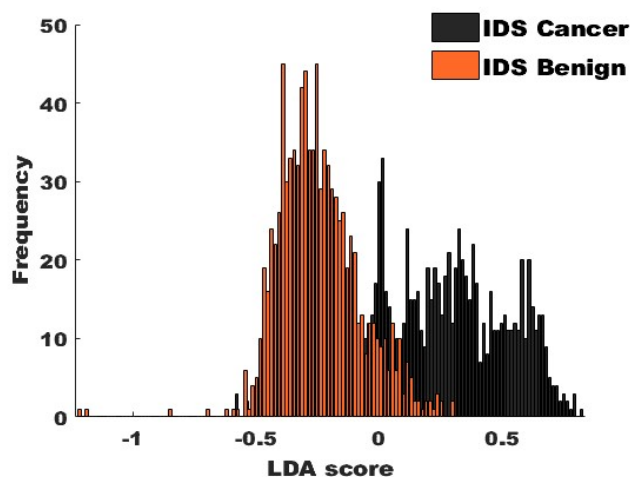
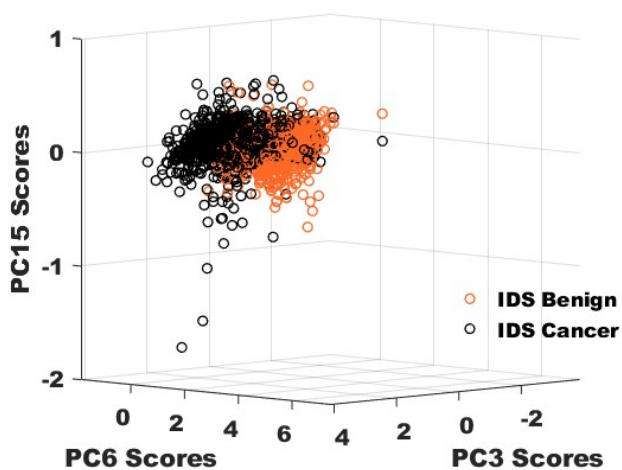
Cancer vs Benign (Interval Surgery)

a)



b)

Principal Component	F value ($F_{crit} 11, p=0.001$)
10	119
18	49
4	41
12	18
7	17
2	17
6	17
20	15

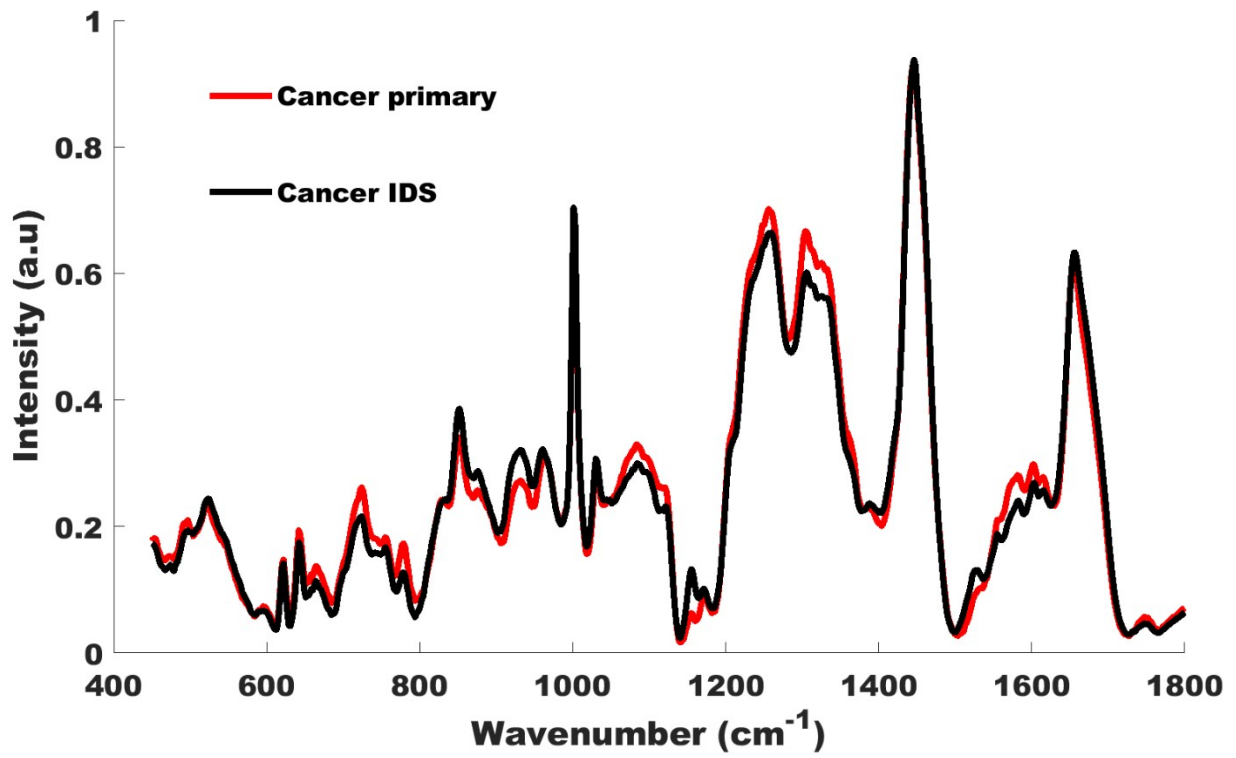


c)

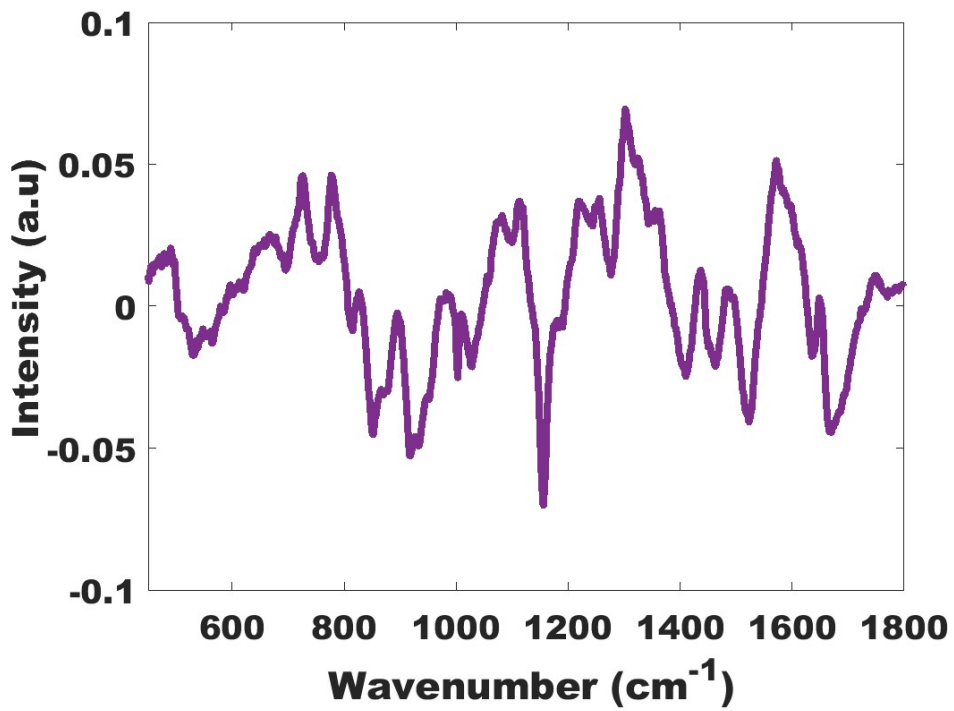
Figure S5 – Principal component analysis of cancer and benign (interval surgery) peritoneal spectra. a) The loadings of the 25 principal components generated from the dataset. b) Summary of PCs with an F value greater than F_{crit} on analysis of variance (ANOVA), with a p value of 0.001 for the significance of the test. c) PCA scores plot and histogram.

Peritoneal Tissue

Cancer Primary surgery vs Cancer Interval Surgery

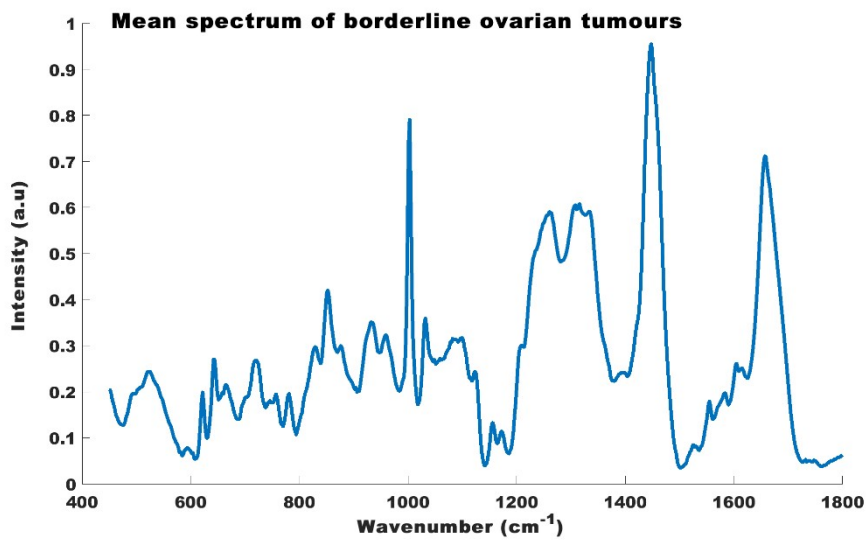
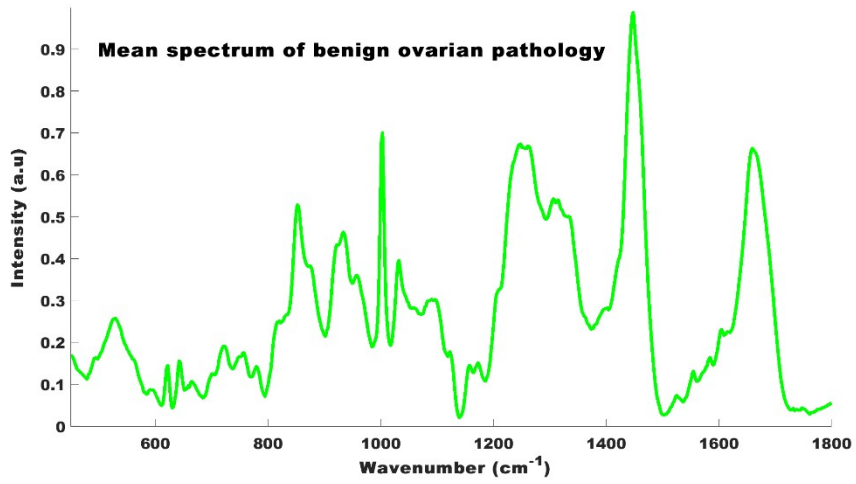


a)



b)

Figure S6 – Spectra of peritoneal tissue. a) Mean comparison of primary surgery cancer and interval debulking surgery cancer groups. b) Difference between the mean spectrum of the groups: primary surgery cancer minus interval debulking surgery cancer



Group mean spectra

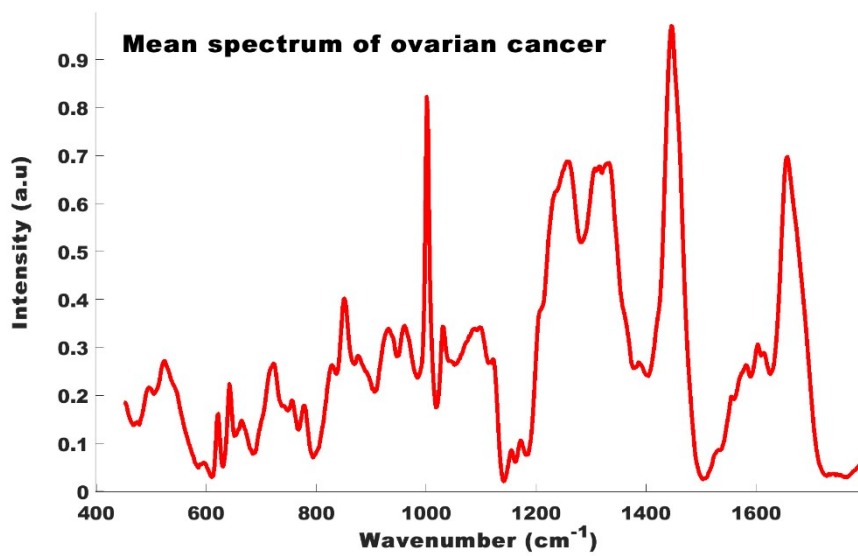


Figure S7 – Mean spectra of benign, borderline and cancer in ovarian tissue.
