

Supplementary Materials I

*Each BPI Chromatogram of Every Serum/Hippocampus Sample in
Control/Model/HPF Group in ESI⁺/ESI⁻ Mode*

Supplementary Materials II

*MS Spectra of Each Potential Biomarker
in Function 1 (Low Energy) and Function 2 (High Energy)*

Supplementary Materials I

*Each BPI Chromatogram of Every Serum/Hippocampus Sample in
Control/Model/HPF Group in ESI⁺/ESI⁻ Mode*

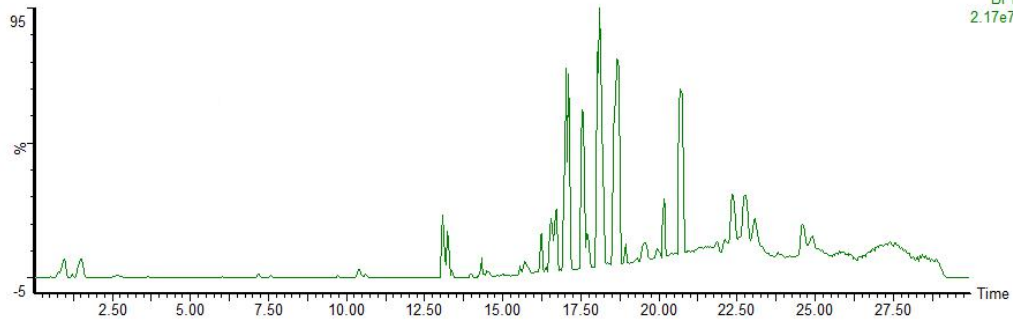
1. In ESI⁺ mode, each BPI chromatogram of every serum sample in normal control group (ESI⁺/ serum/ normal control group).
2. In ESI⁺ mode, each BPI chromatogram of every serum sample in model group (ESI⁺/ serum/ model group).
3. In ESI⁺ mode, each BPI chromatogram of every serum sample in HPF group (ESI⁺/ serum/ HPF group).
4. In ESI⁺ mode, each BPI chromatogram of every hippocampus sample in normal control group (ESI⁺/ hip/ normal control group).
5. In ESI⁺ mode, each BPI chromatogram of every hippocampus sample in model group (ESI⁺/ hip/ model group).
6. In ESI⁺ mode, each BPI chromatogram of every hippocampus sample in HPF group (ESI⁺/ hip/ HPF group).
7. In ESI⁻ mode, each BPI chromatogram of every serum sample in normal control group (ESI⁻/ serum/ normal control group).
8. In ESI⁻ mode, each BPI chromatogram of every serum sample in model group (ESI⁻/ serum/ model group).
9. In ESI⁻ mode, each BPI chromatogram of every serum sample in HPF group (ESI⁻/ serum/ HPF group).

10. In ESI⁻ mode, each BPI chromatogram of every hippocampus sample in normal control group (ESI⁻/ hip/ normal control group).
11. In ESI⁻ mode, each BPI chromatogram of every hippocampus sample in model group (ESI⁻/ hip/ model group).
12. In ESI⁻ mode, each BPI chromatogram of every hippocampus sample in HPF group (ESI⁻/ hip/ HPF group).

1. ESI+/ serum/ normal control group

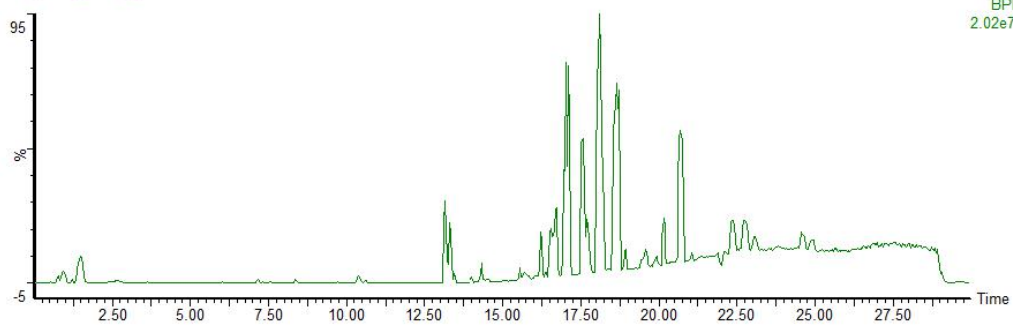
wcz_blood_blank_1_pos

1: TOF MS ES+
BPI
2.17e7



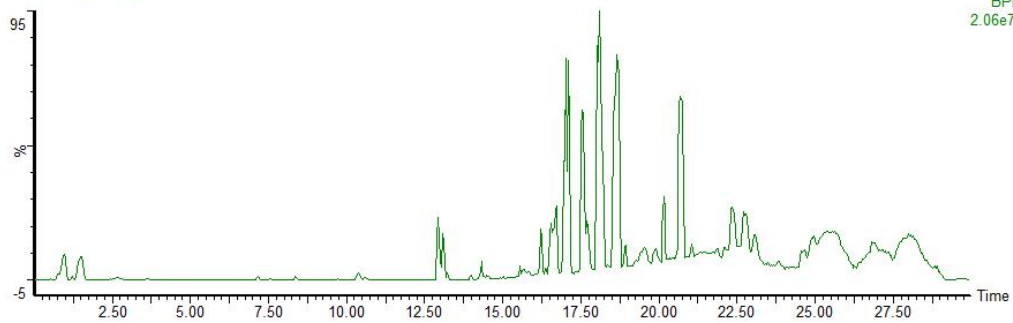
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1: TOF MS ES+
BPI
2.02e7



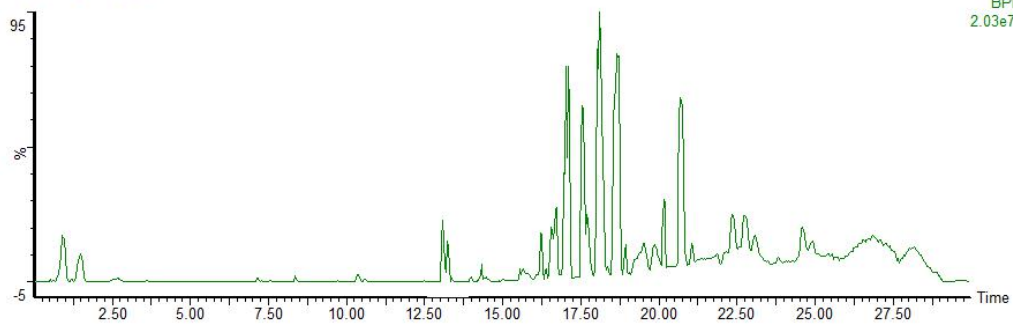
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1: TOF MS ES+
BPI
2.06e7



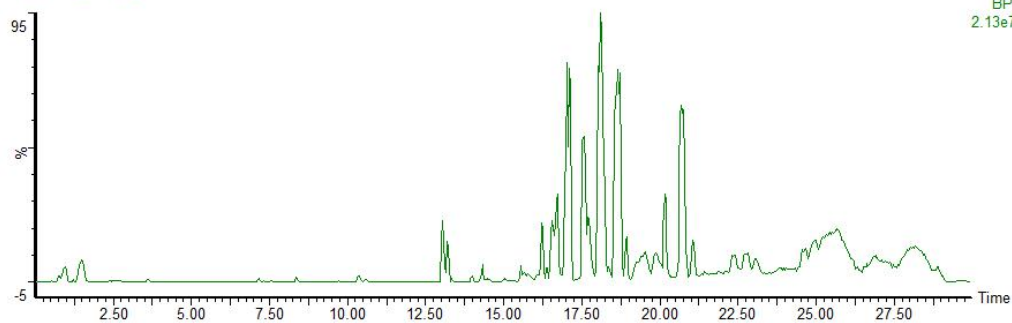
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1: TOF MS ES+
BPI
2.03e7



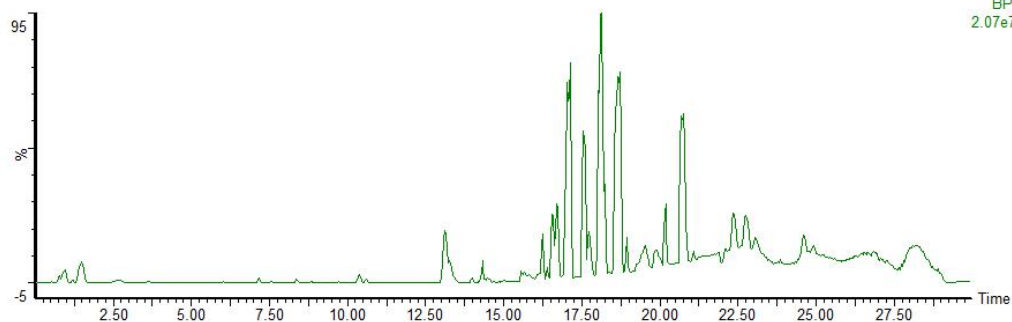
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1: TOF MS ES+
BPI
2.13e7



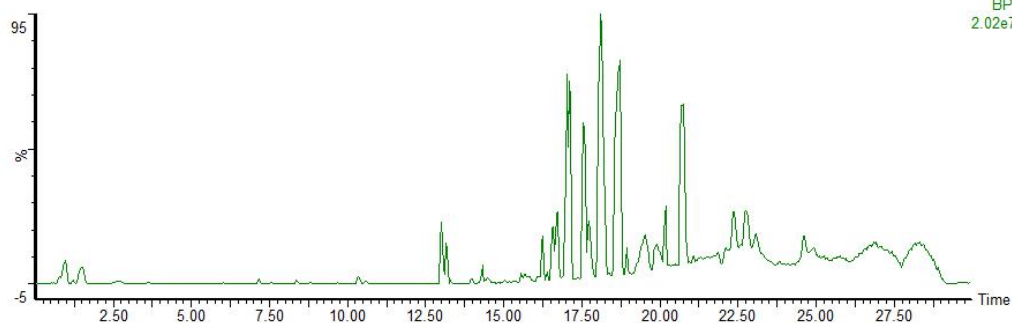
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1: TOF MS ES+
BPI
2.07e7



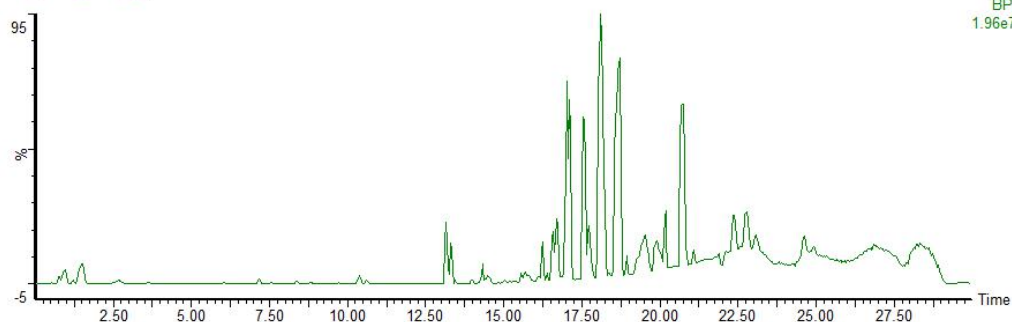
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1: TOF MS ES+
BPI
2.02e7



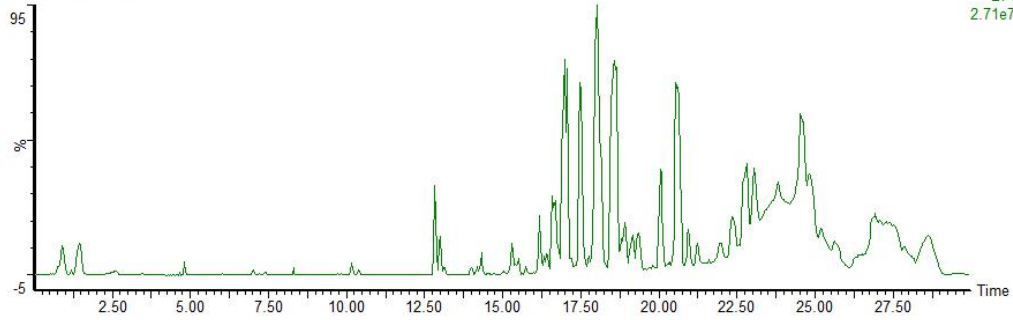
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1: TOF MS ES+
BPI
1.96e7

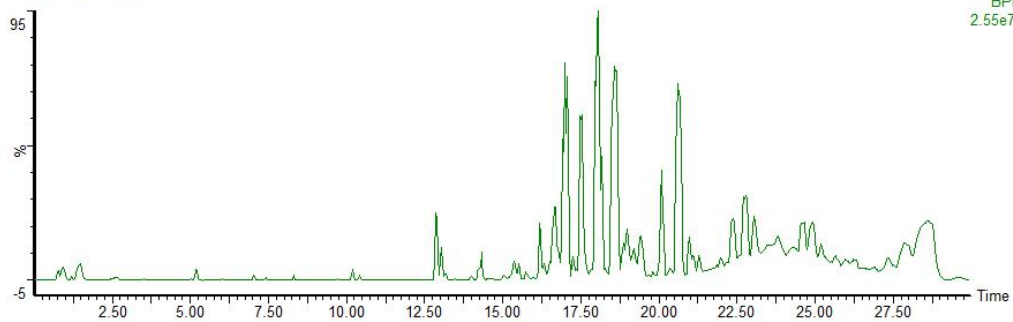


2. ESI+/ serum/ model group

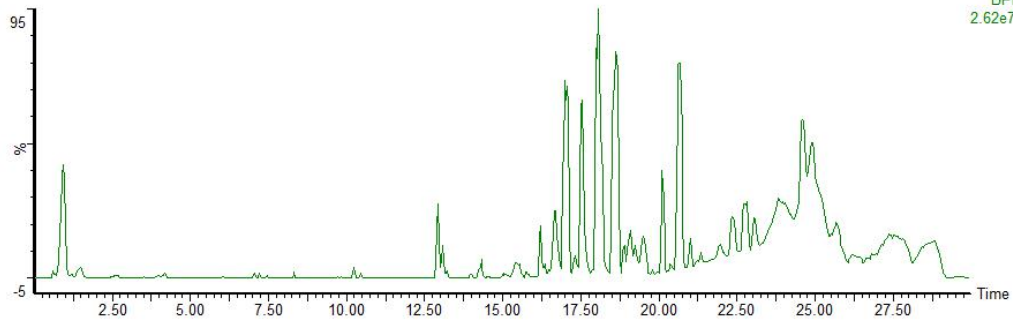
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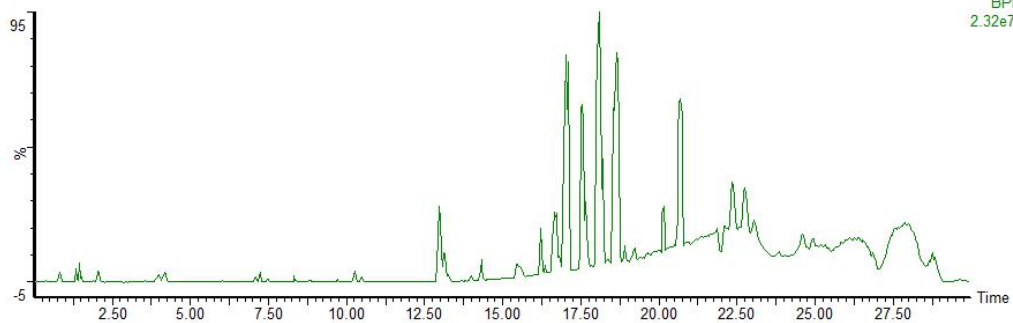
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wcz_blood_model_3_pos

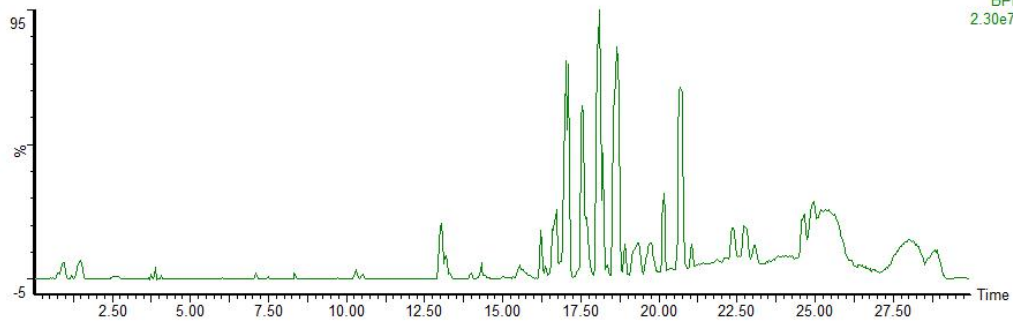


wcz_blood_model_4_pos



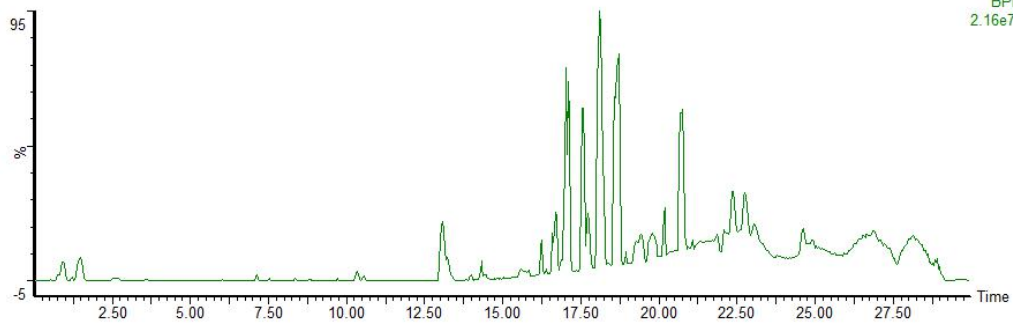
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1: TOF MS ES+
BPI
2.30e7



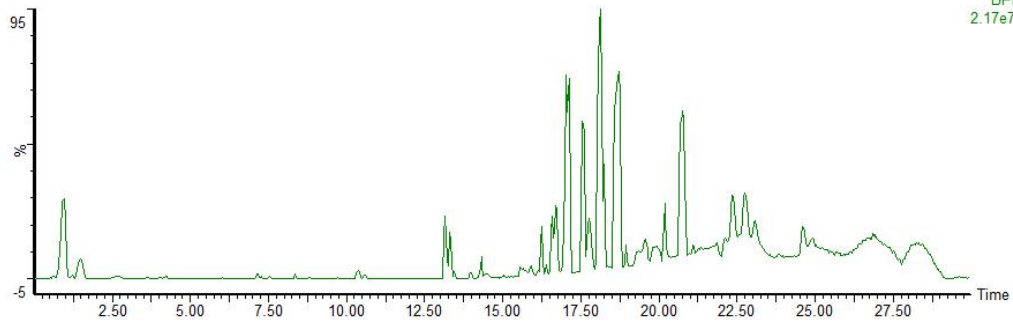
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1: TOF MS ES+
BPI
2.16e7



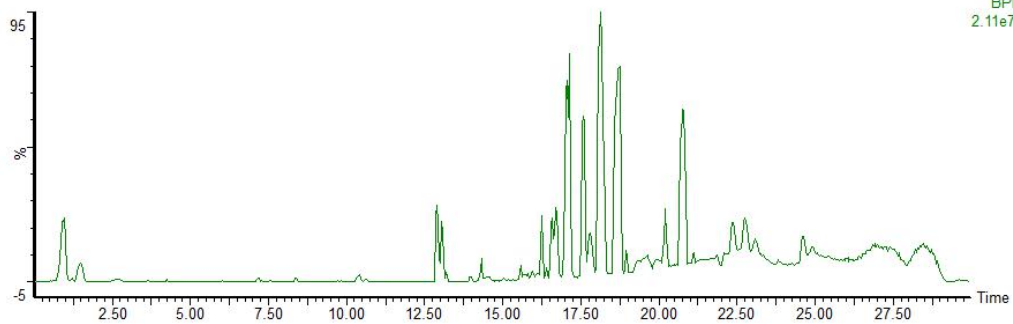
wcz_blood_model_7_pos

1: TOF MS ES+
BPI
2.17e7

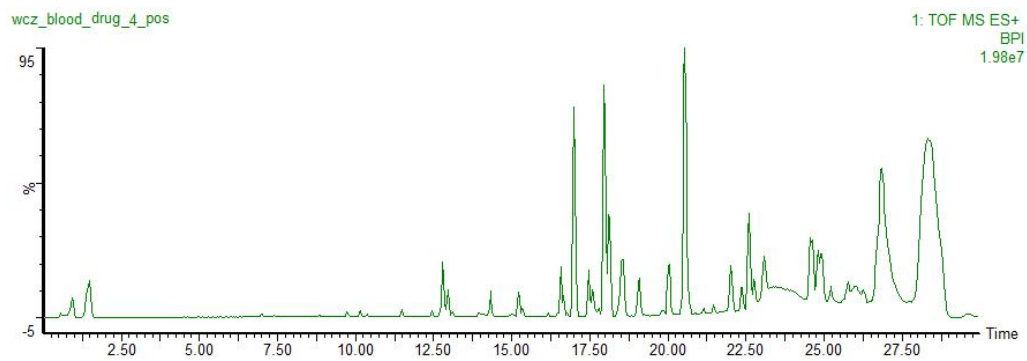
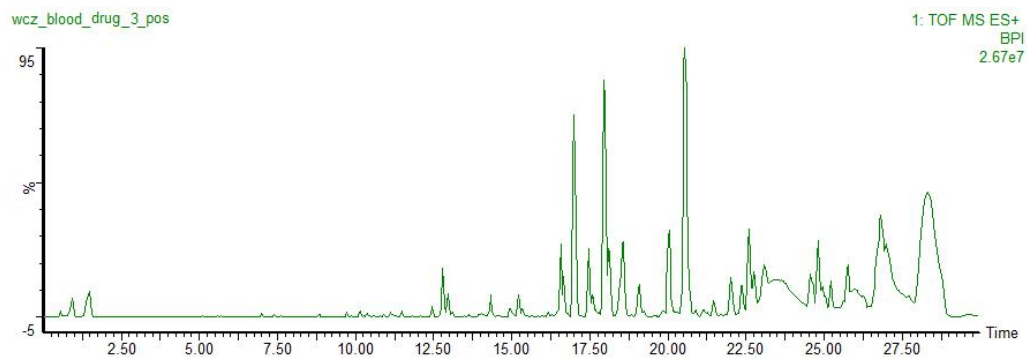
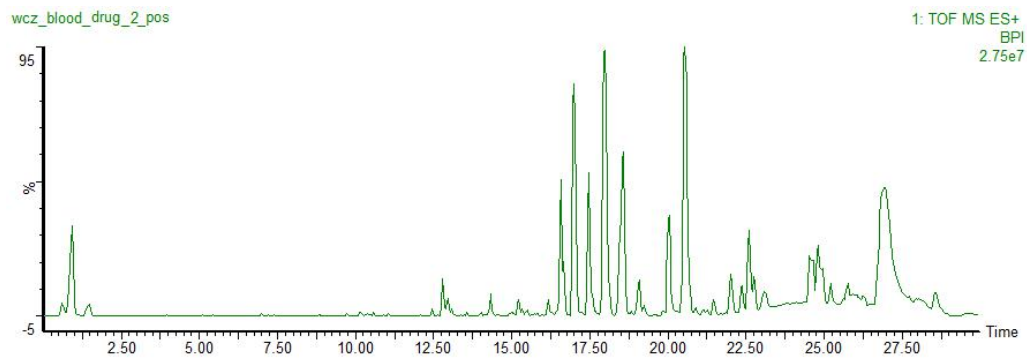
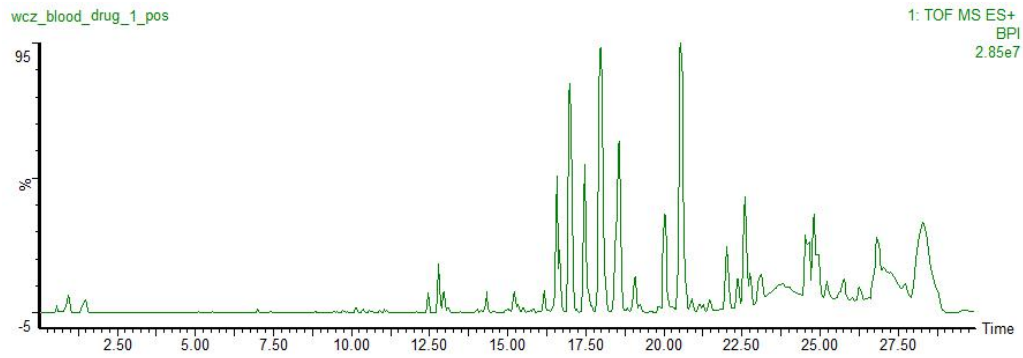


wcz_blood_model_8_pos

1: TOF MS ES+
BPI
2.11e7

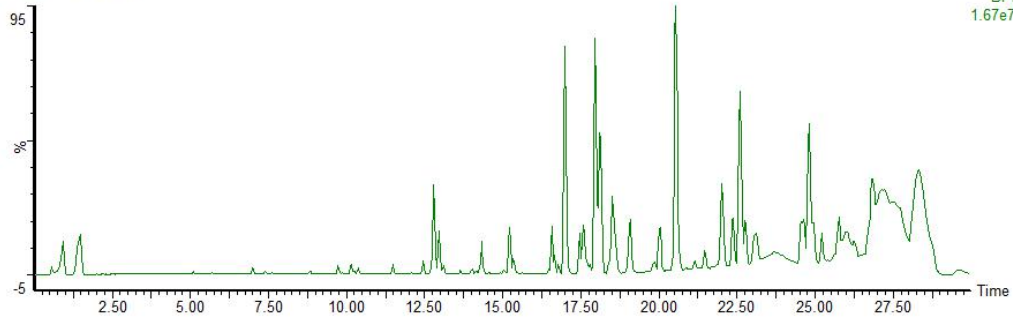


3. ESI+/ serum/ HPF group



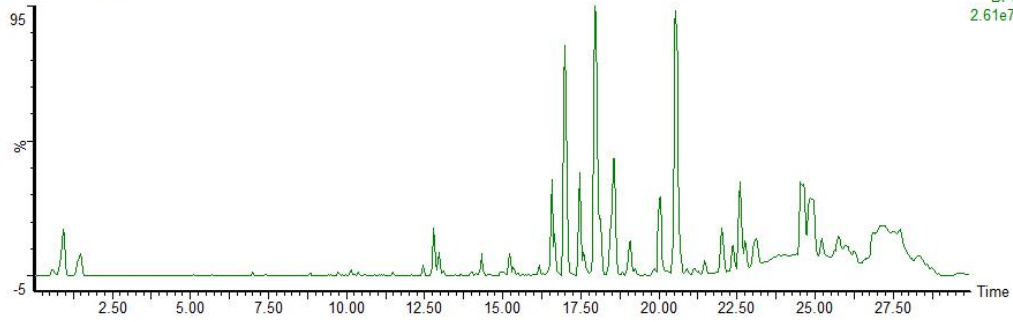
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1: TOF MS ES+
BPI
1.67e7



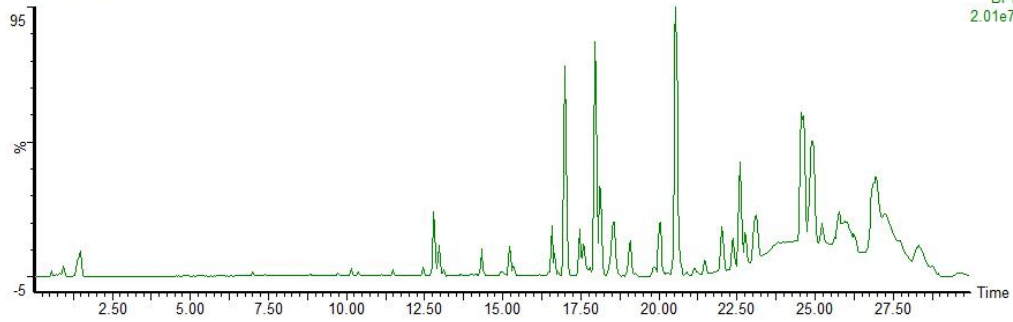
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1: TOF MS ES+
BPI
2.61e7



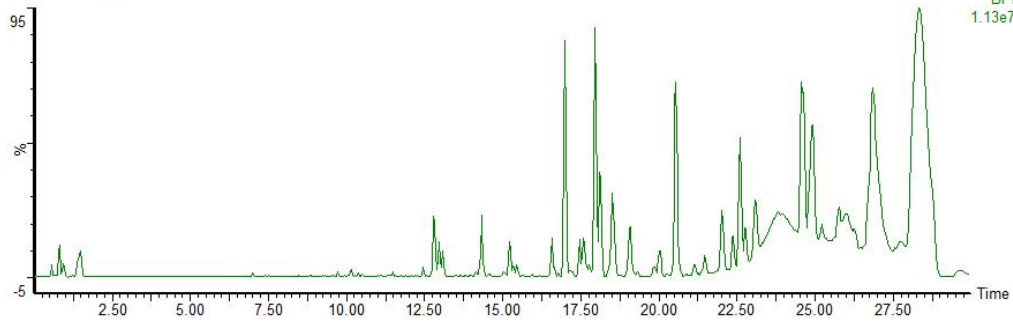
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1: TOF MS ES+
BPI
2.01e7

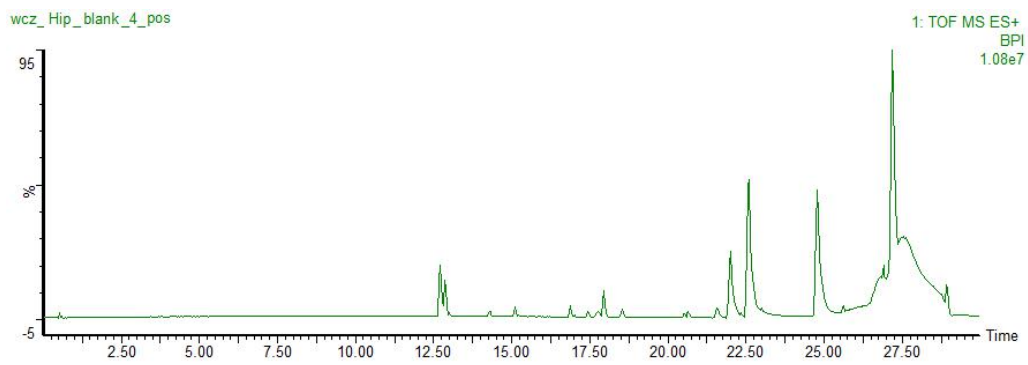
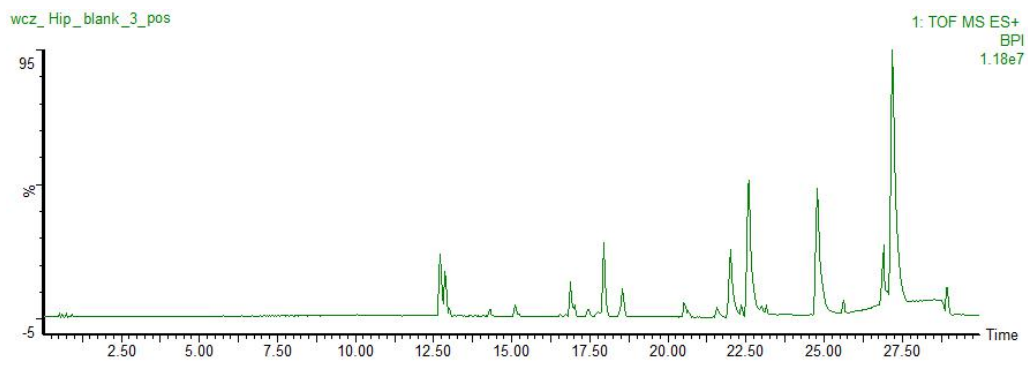
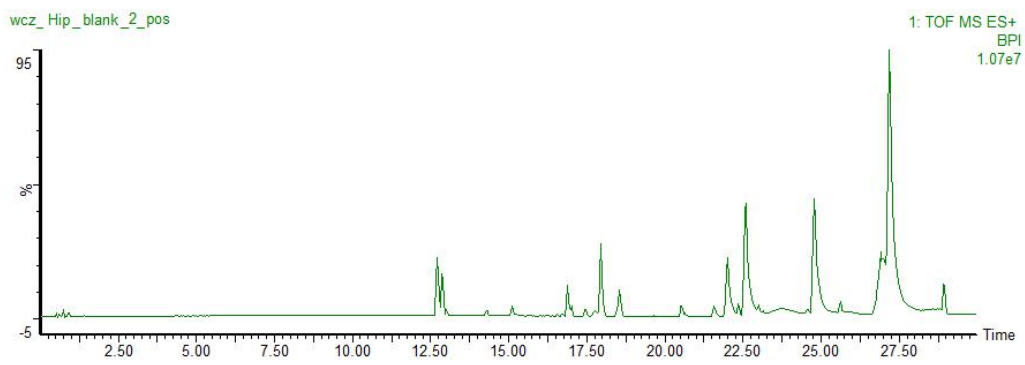
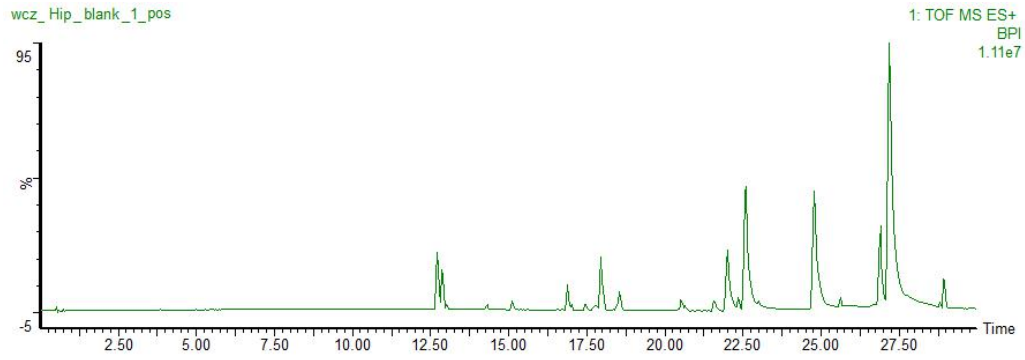


wcz_blood_drug_8_pos

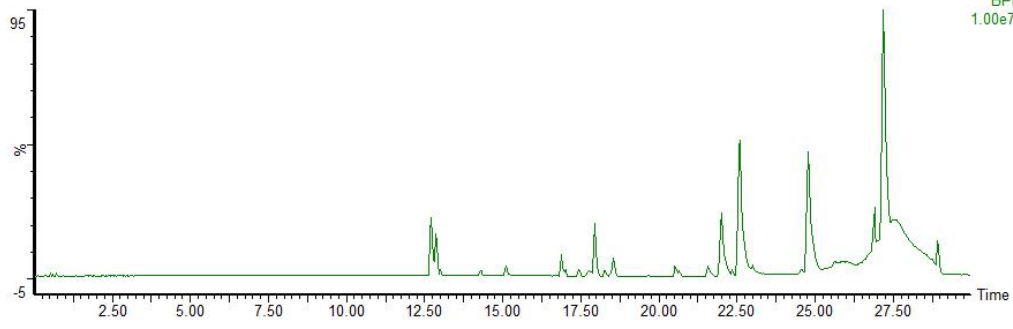
1: TOF MS ES+
BPI
1.13e7



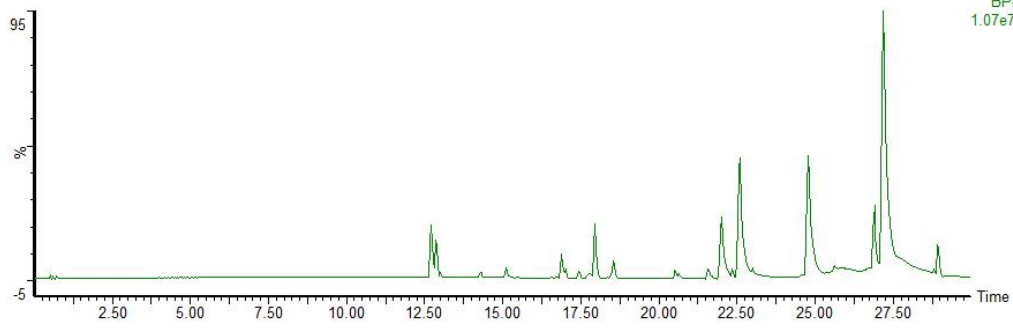
4. ESI+/ hip/ normal control group



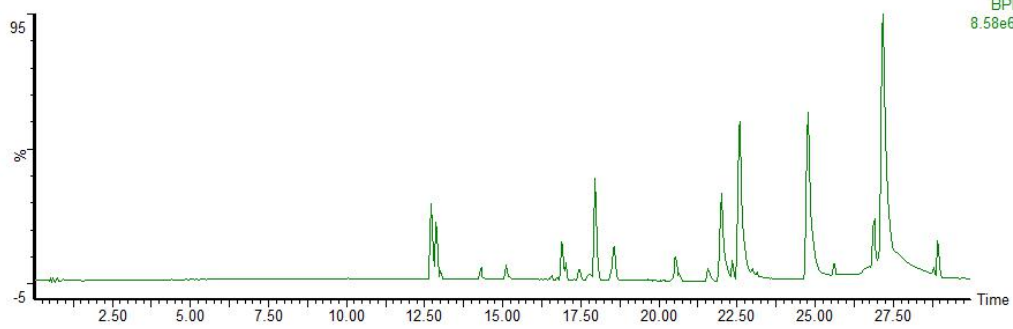
wcz_Hip_blank_5_pos



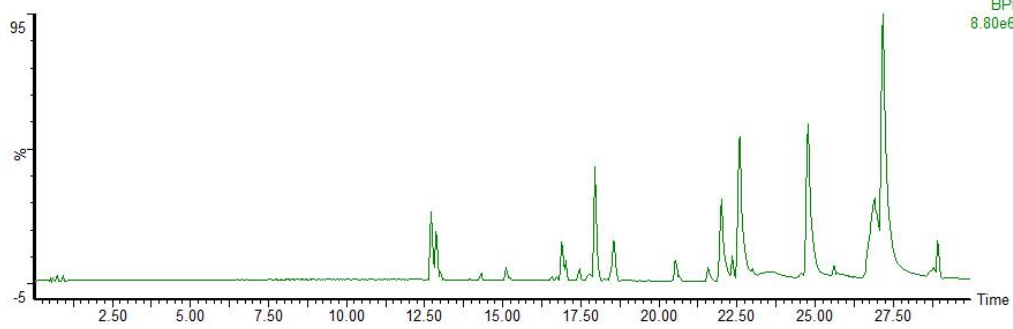
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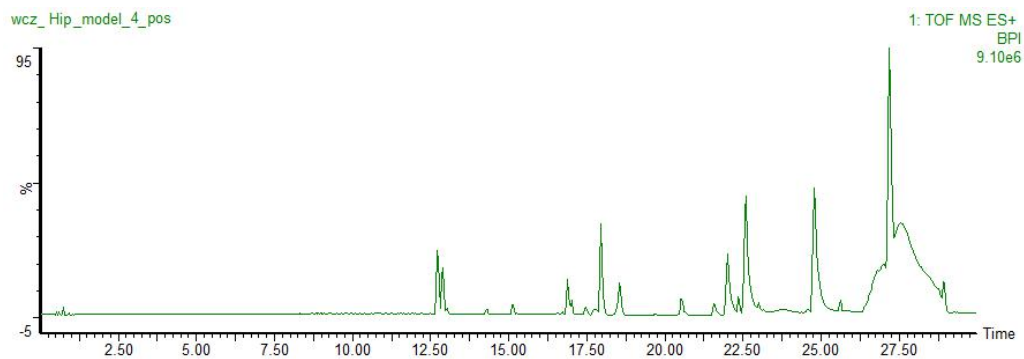
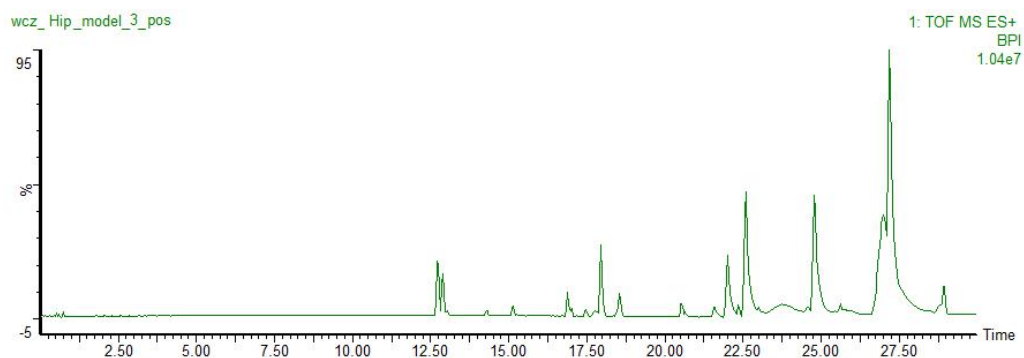
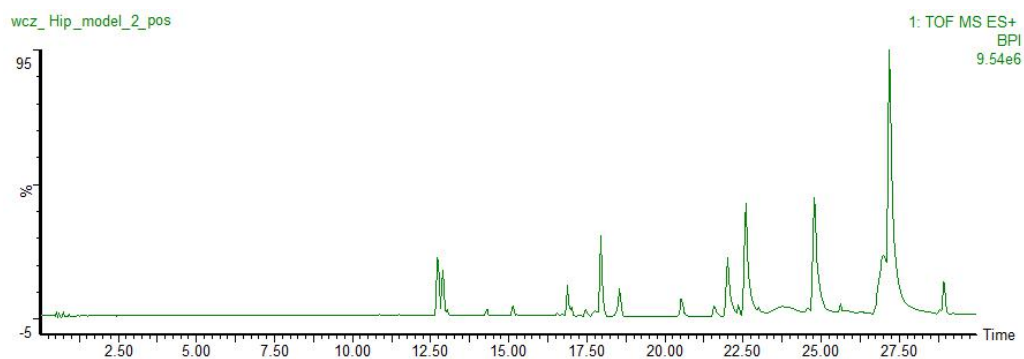
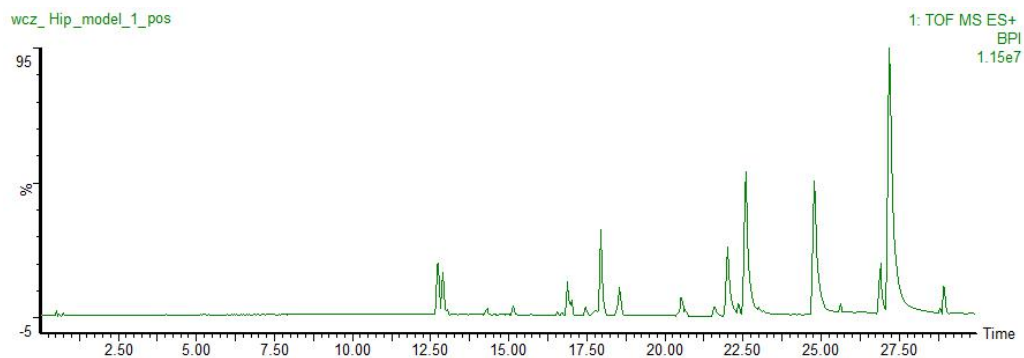
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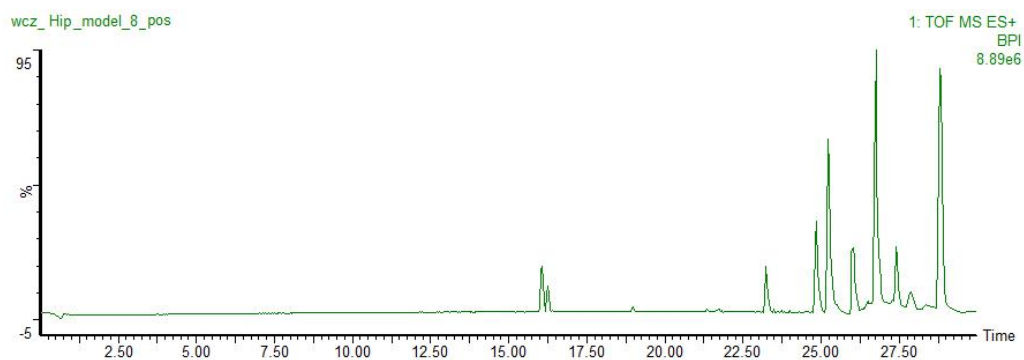
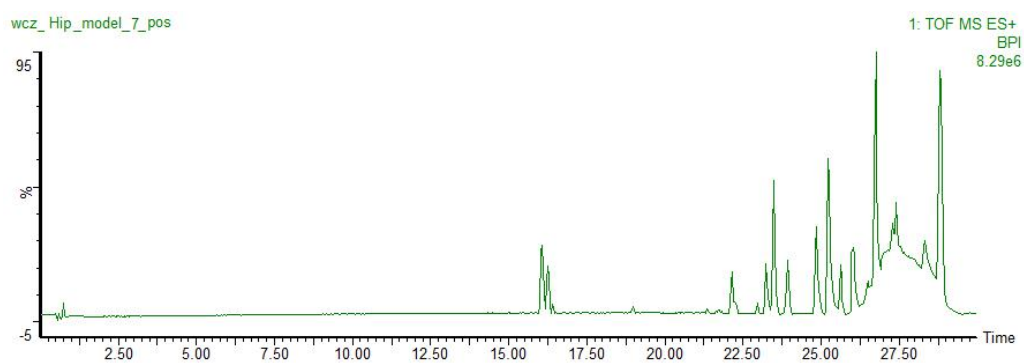
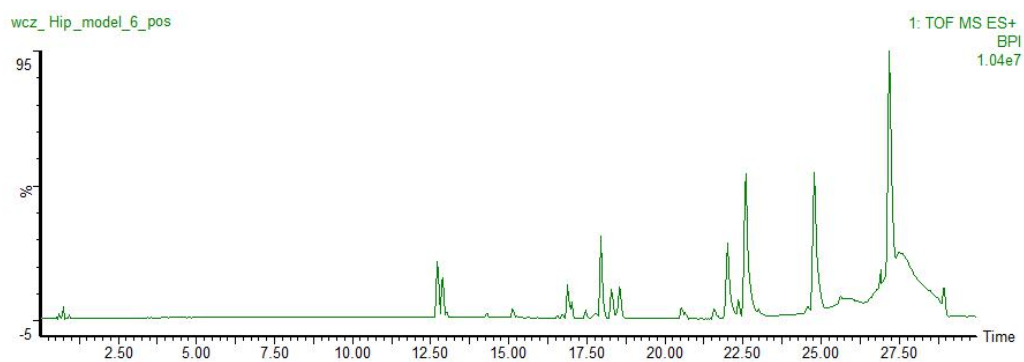
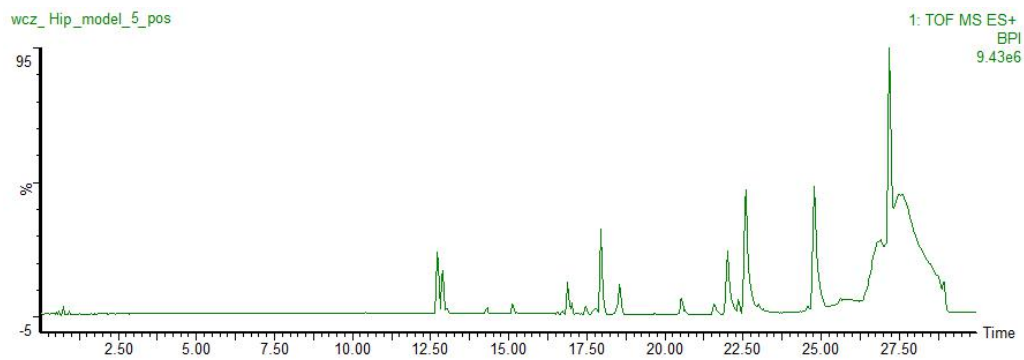


wcz_Hip_blank_8_pos



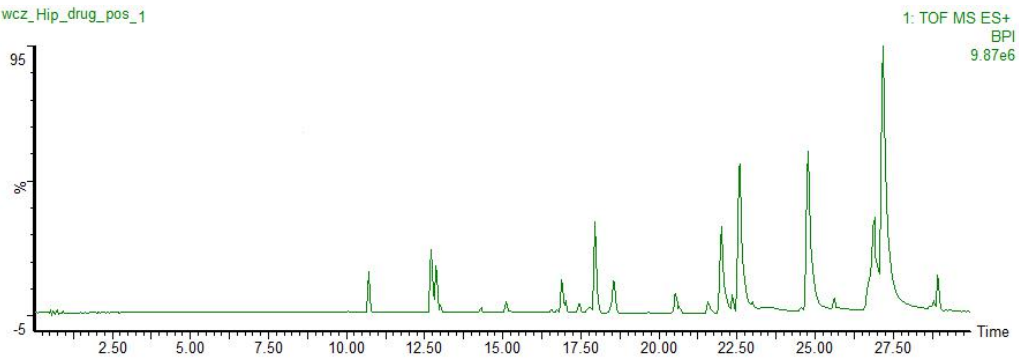
5. ESI+/ hip/ model group



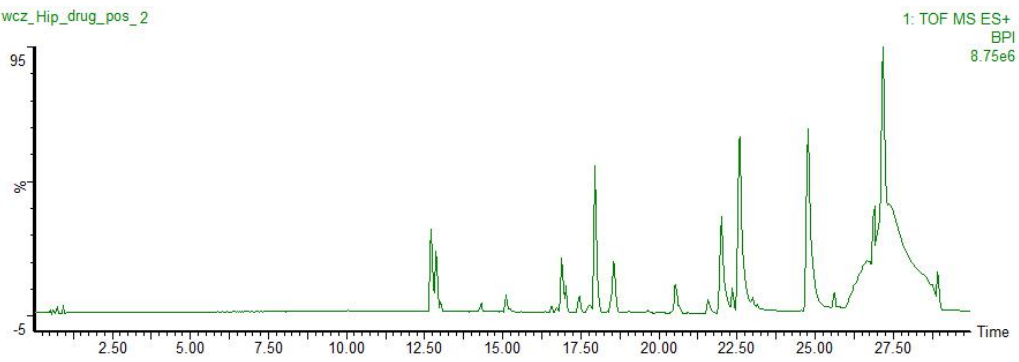


6. ESI+/ hip/ HPF group

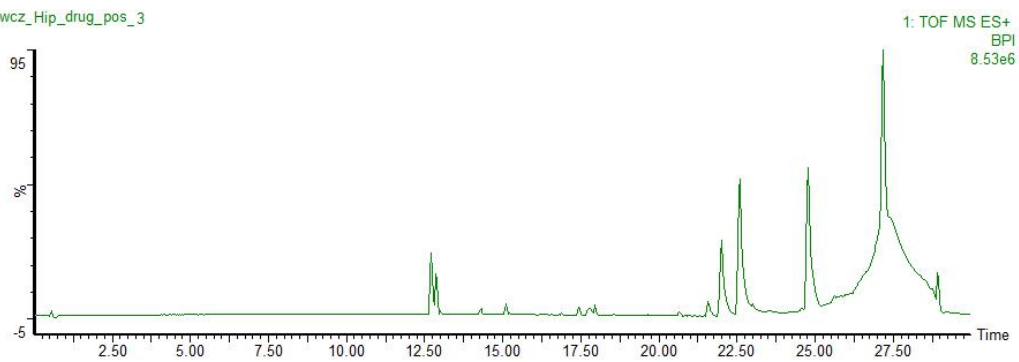
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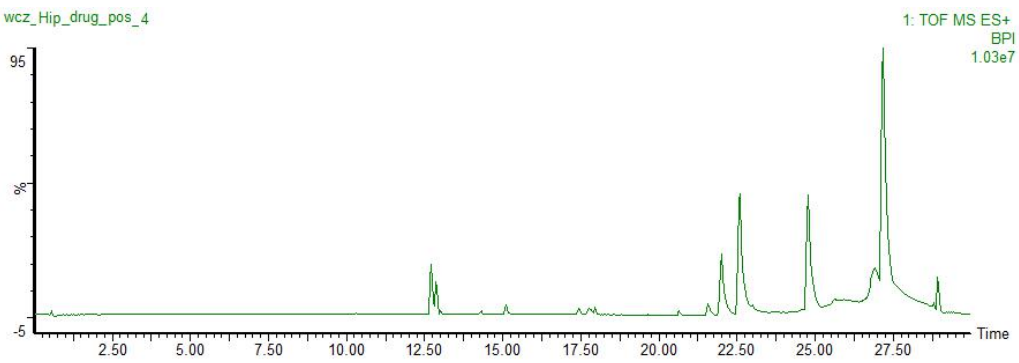
wcz_Hip_drug_pos_2



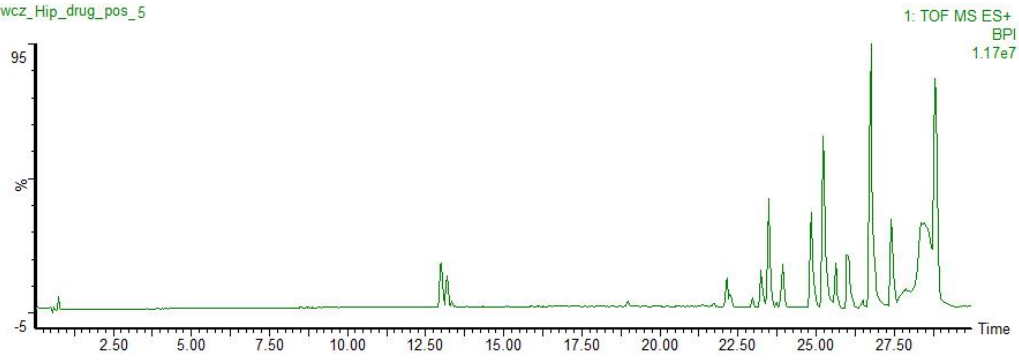
wcz_Hip_drug_pos_3



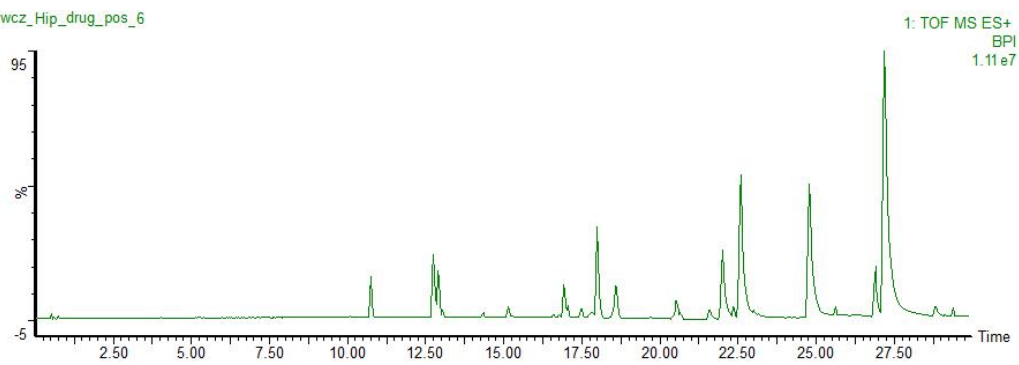
wcz_Hip_drug_pos_4



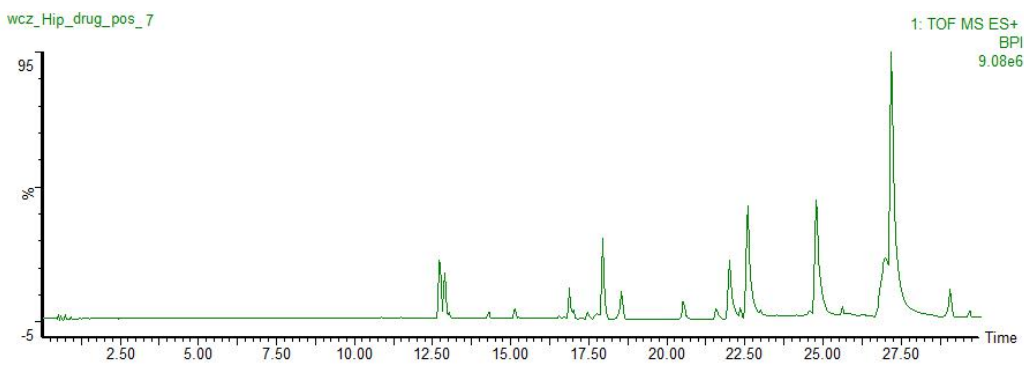
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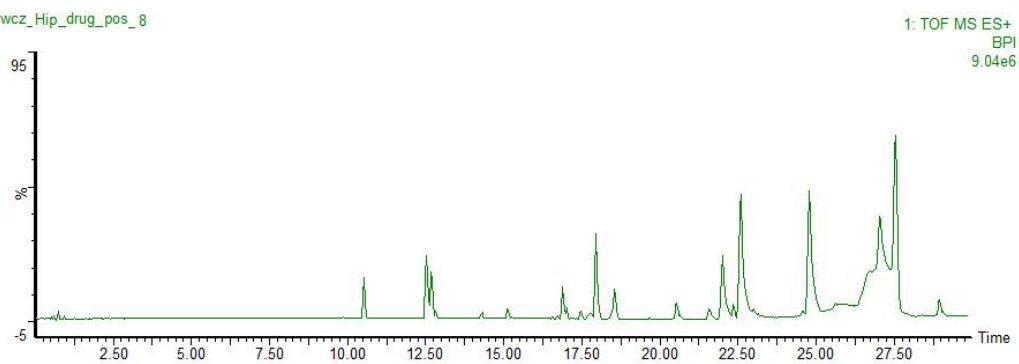
wcz_Hip_drug_pos_6



wcz_Hip_drug_pos_7



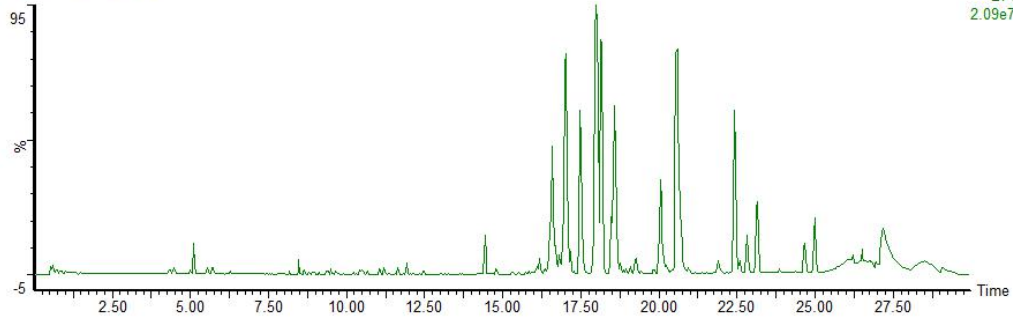
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7. ESI-/ serum/ normal control group

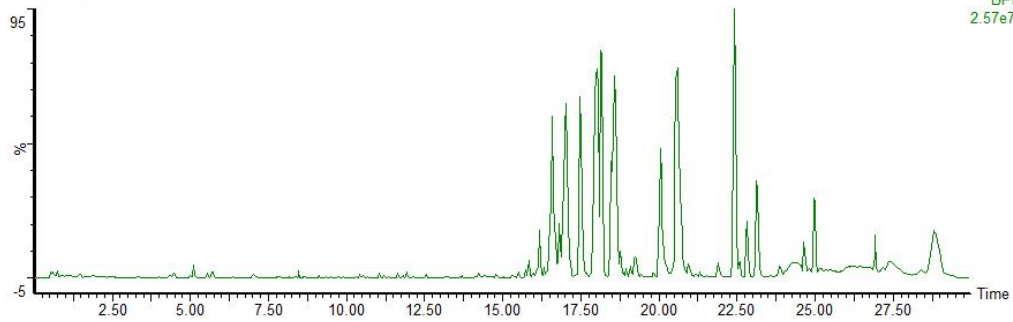
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1: TOF MS ES-
BPI
2.09e7



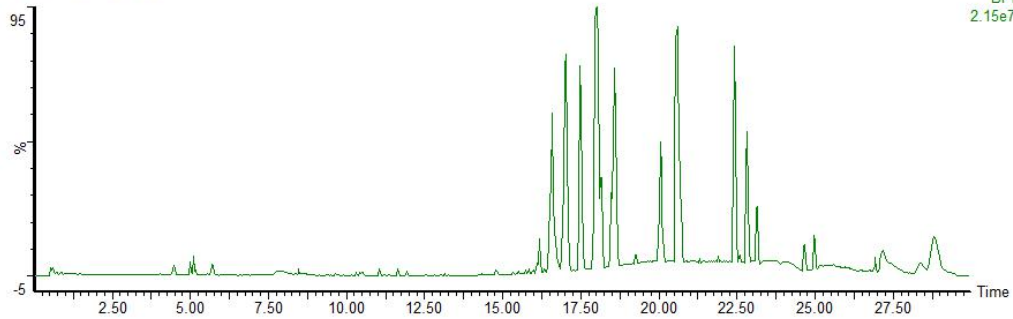
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1: TOF MS ES-
BPI
2.57e7



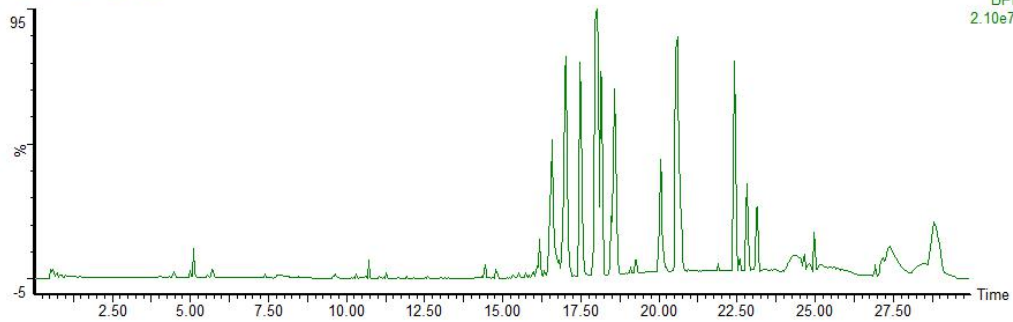
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1: TOF MS ES-
BPI
2.15e7



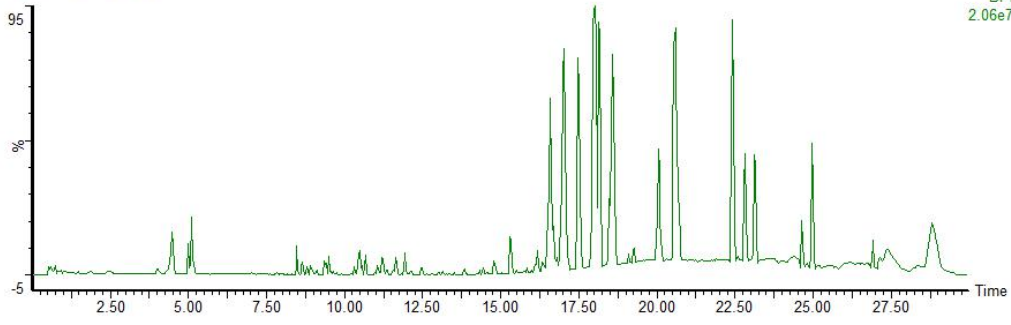
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1: TOF MS ES-
BPI
2.10e7



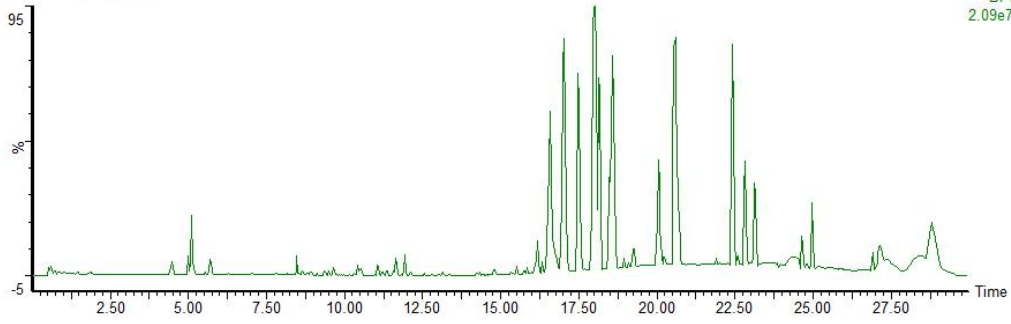
wcz_blank_blood_neg_5

1: TOF MS ES-
BPI
2.06e7



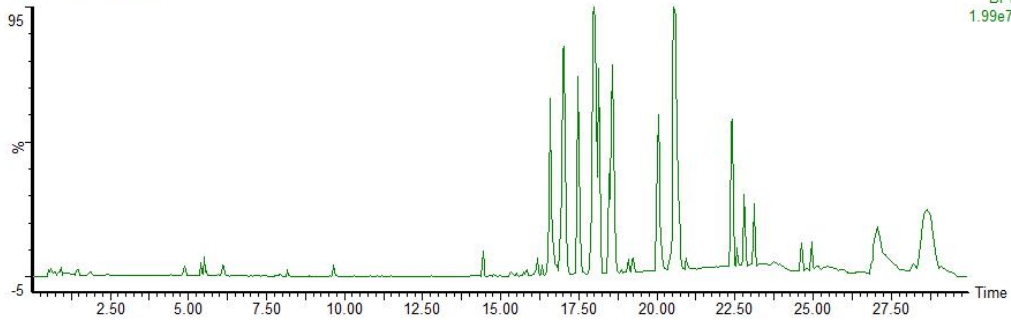
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1: TOF MS ES-
BPI
2.09e7



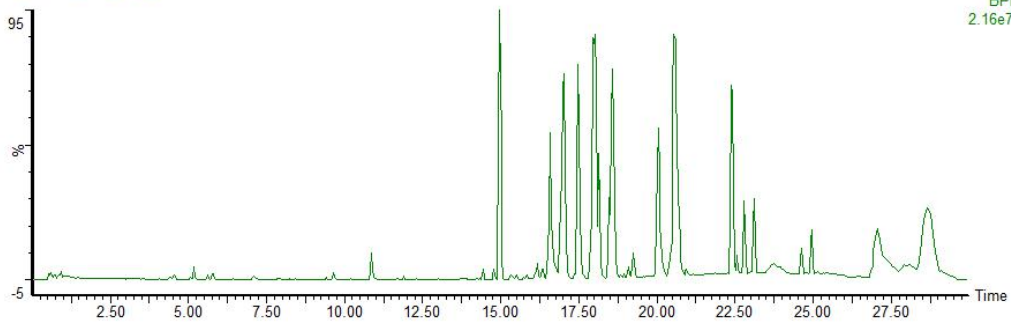
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1: TOF MS ES-
BPI
1.99e7



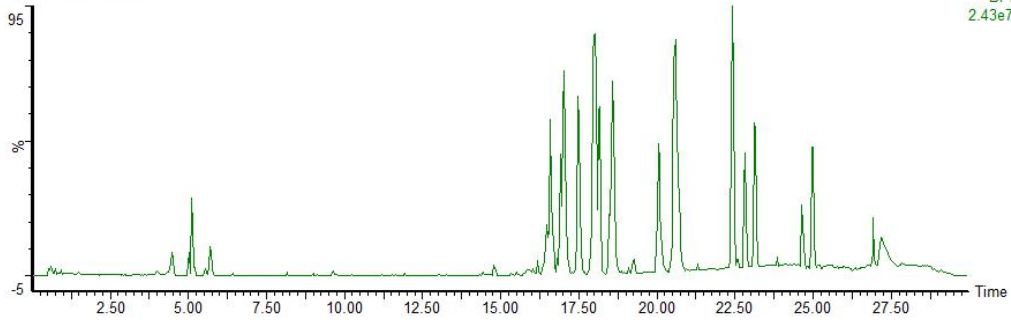
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1: TOF MS ES-
BPI
2.16e7

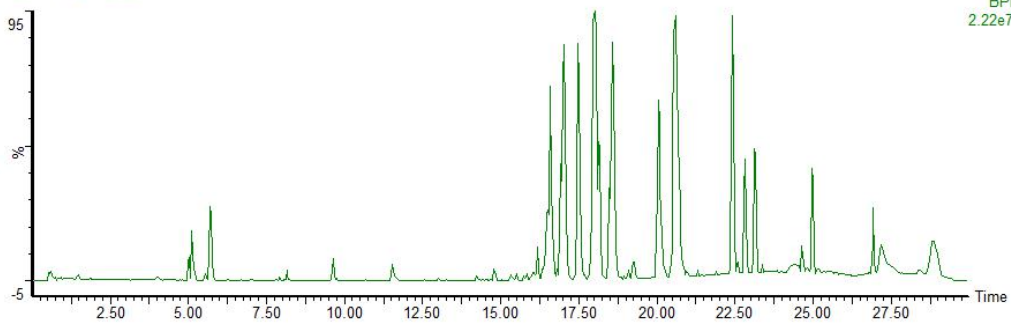


8. ESI-/ serum/ model group

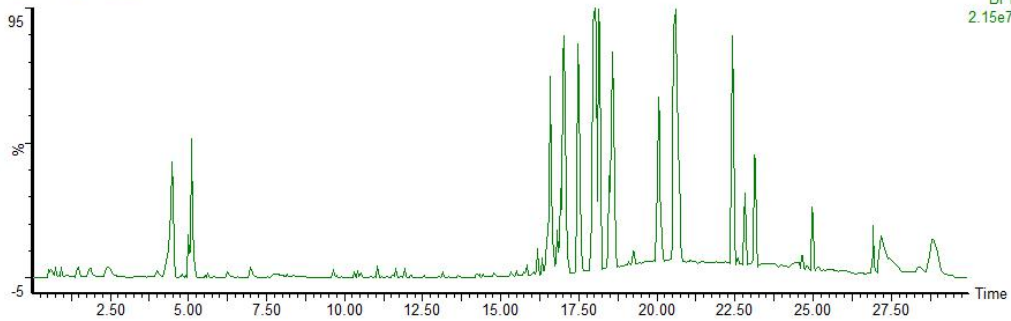
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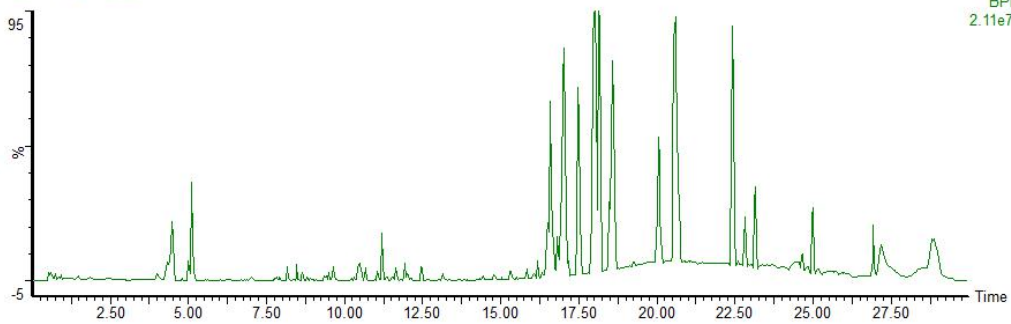
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wcz_blood_model_3_neg

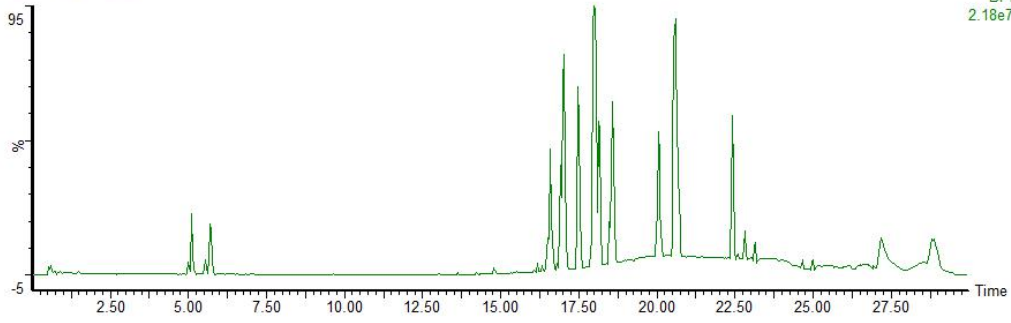


wcz_blood_model_4_neg



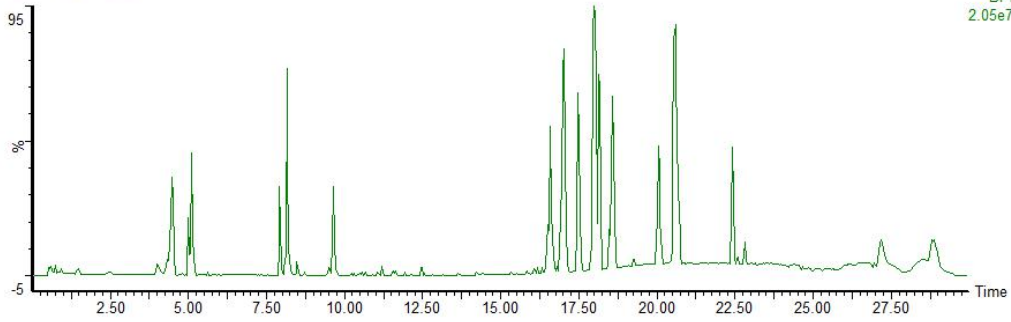
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1: TOF MS ES-
BPI
2.18e7



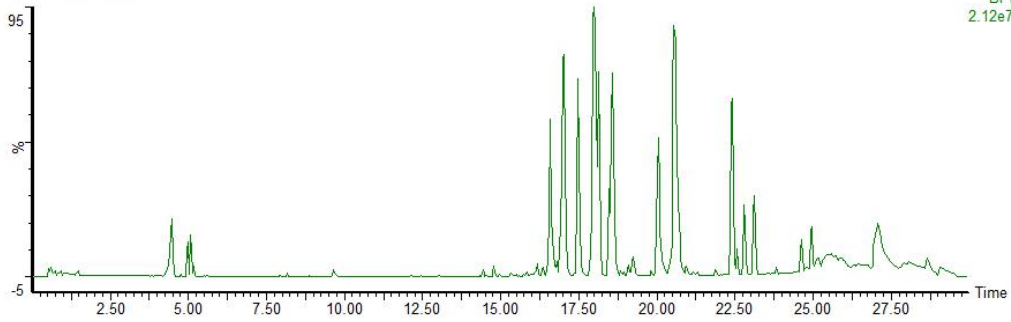
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1: TOF MS ES-
BPI
2.05e7



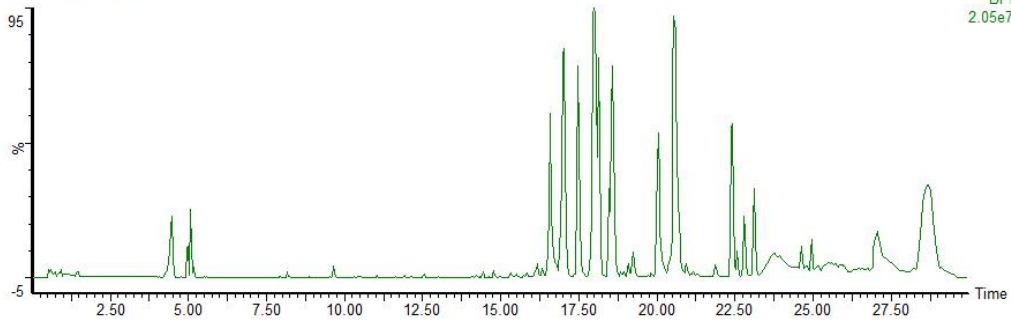
wcz_blood_model_7_neg

1: TOF MS ES-
BPI
2.12e7



wcz_blood_model_8_neg

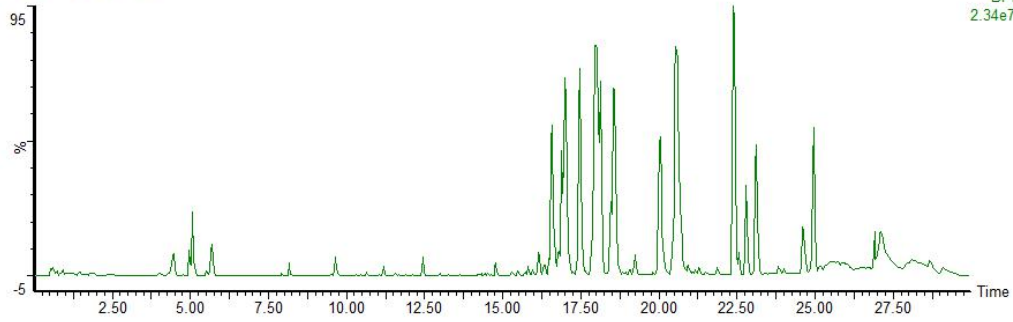
1: TOF MS ES-
BPI
2.05e7



9. ESI-/ serum/ HPF group

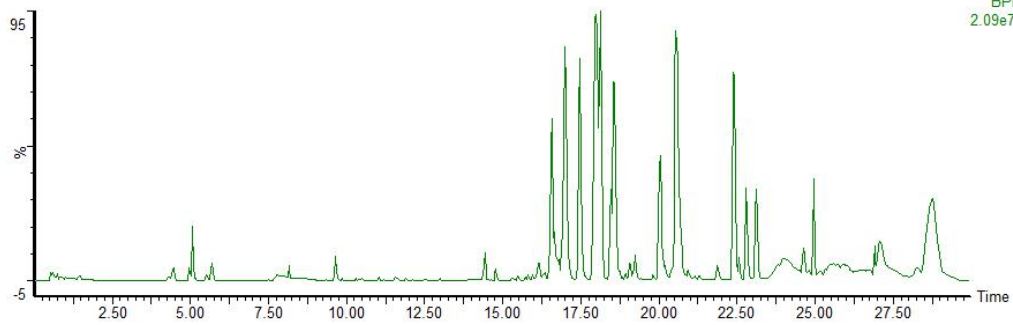
wcz_blood_drug_neg_1

1: TOF MS ES-
BPI
2.34e7



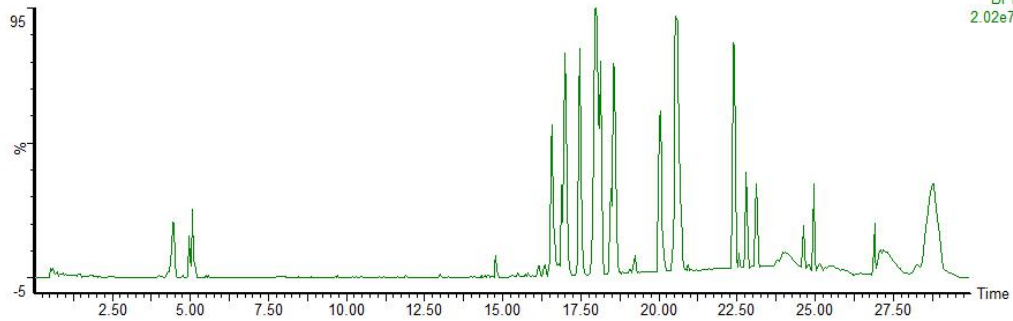
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1: TOF MS ES-
BPI
2.09e7



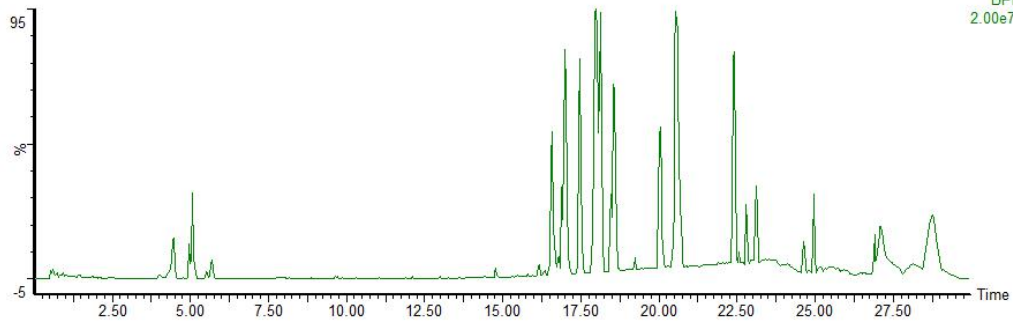
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1: TOF MS ES-
BPI
2.02e7



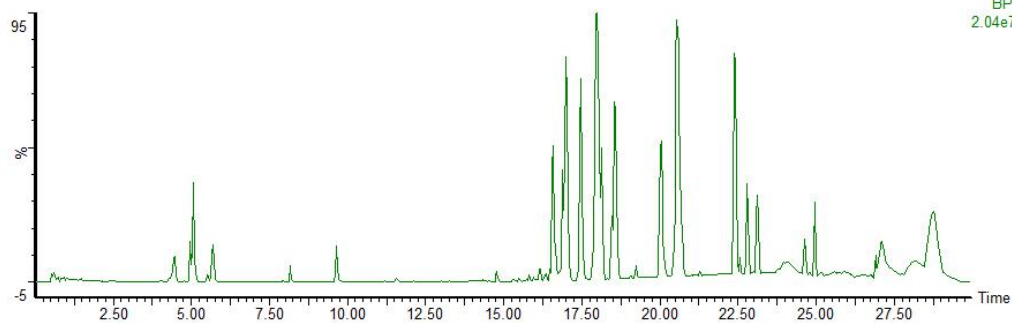
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1: TOF MS ES-
BPI
2.00e7



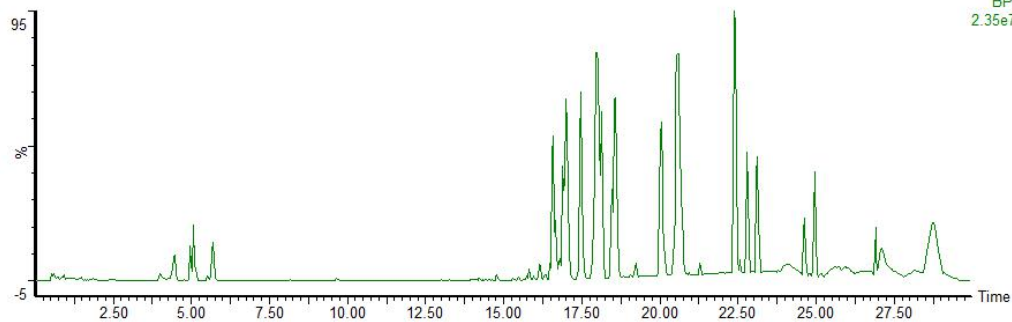
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1: TOF MS ES-
BPI
2.04e7



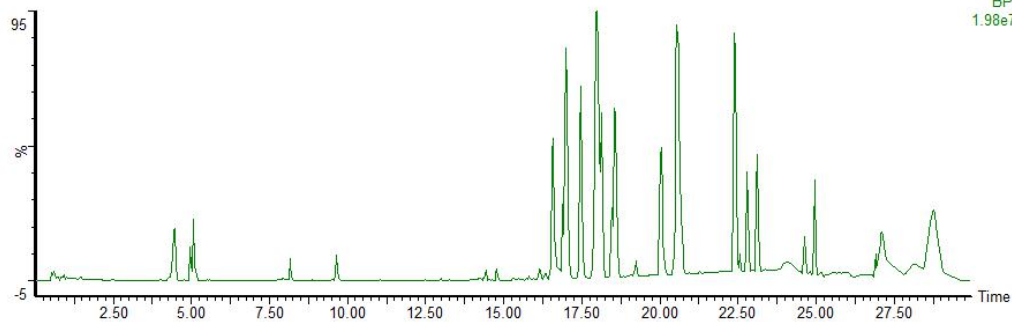
wcz_blood_drug_neg_6

1: TOF MS ES-
BPI
2.35e7



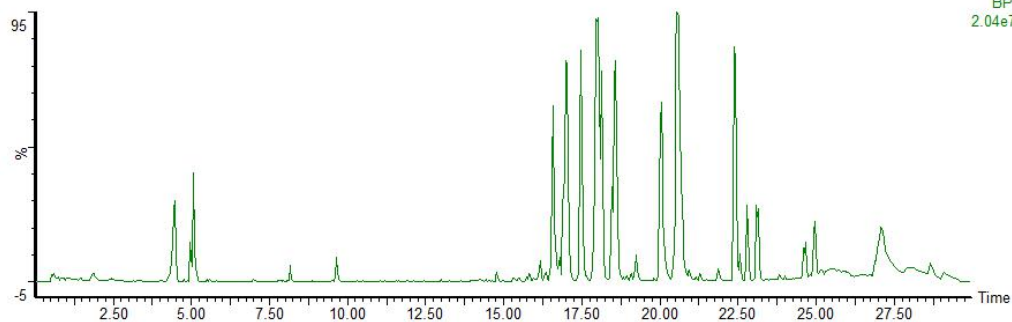
wcz_blood_drug_neg_7

1: TOF MS ES-
BPI
1.98e7



wcz_blood_drug_neg_8

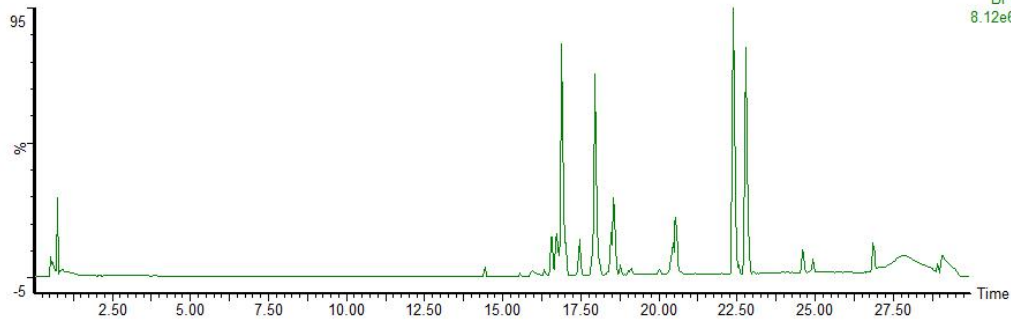
1: TOF MS ES-
BPI
2.04e7



10. ESI-/ hip/ normal control group

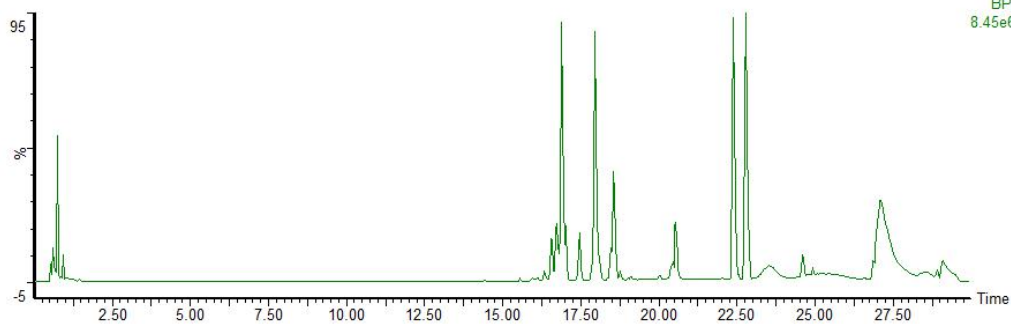
wcz_Hip_blank_1_neg

1: TOF MS ES-
BPI
8.12e6



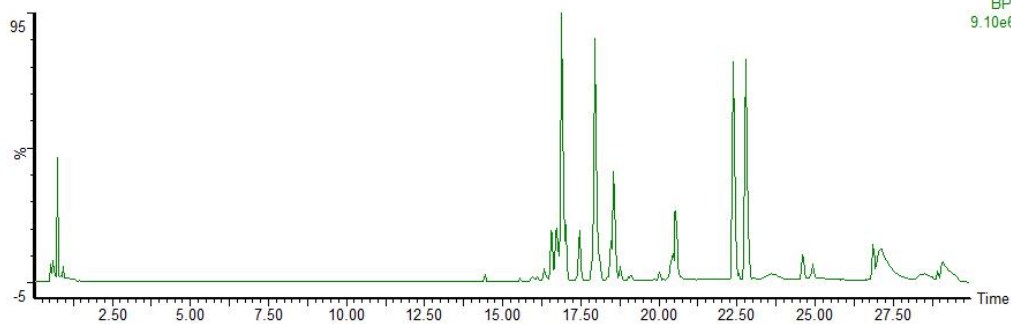
wcz_Hip_blank_2_neg

1: TOF MS ES-
BPI
8.45e6



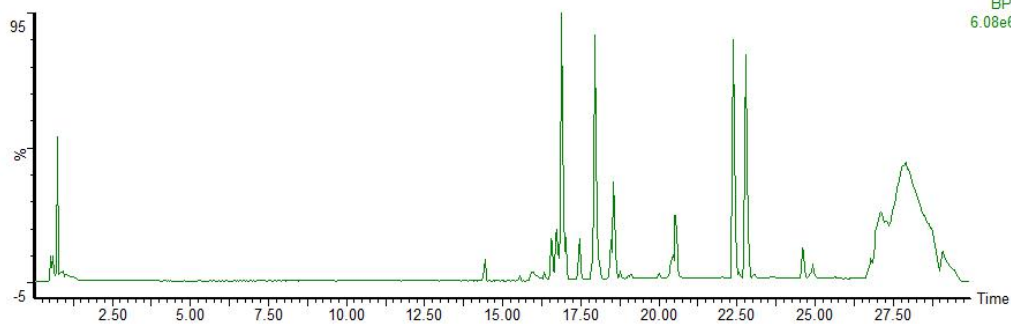
wcz_Hip_blank_3_neg

1: TOF MS ES-
BPI
9.10e6



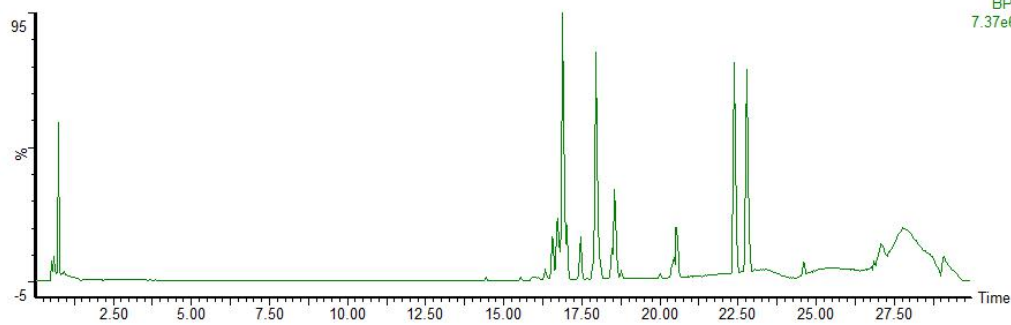
wcz_Hip_blank_4_neg

1: TOF MS ES-
BPI
6.08e6



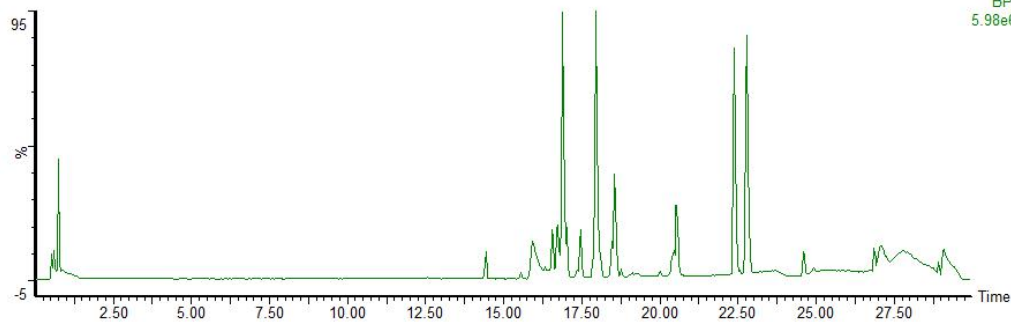
wcz_Hip_blank_5_neg

1: TOF MS ES-
BPI
7.37e6



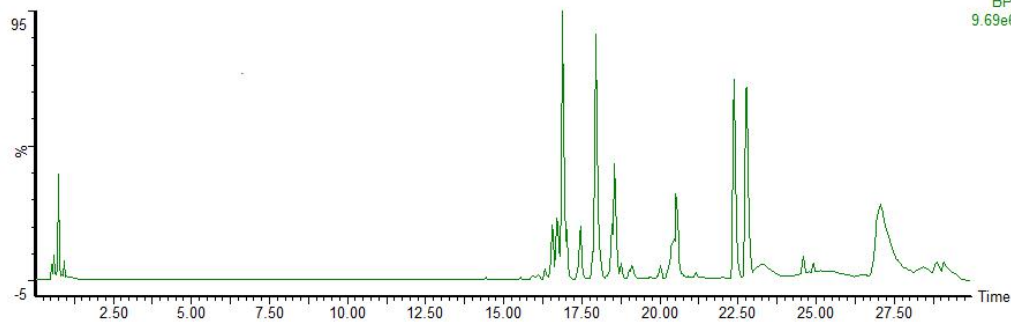
wcz_Hip_blank_6_neg

1: TOF MS ES-
BPI
5.98e6



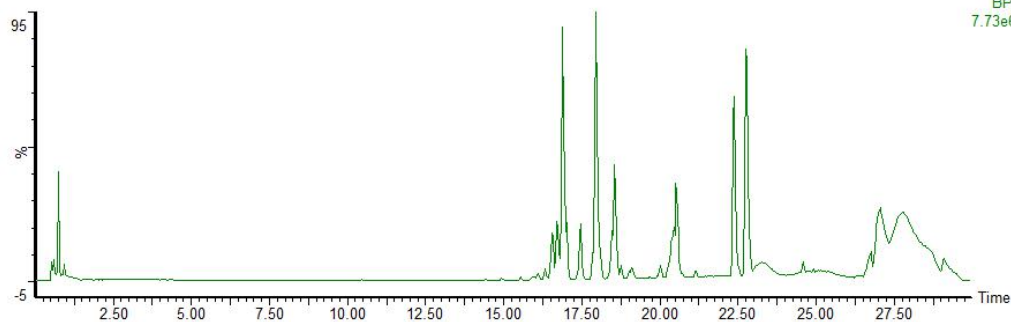
wcz_Hip_blank_7_neg

1: TOF MS ES-
BPI
9.69e6

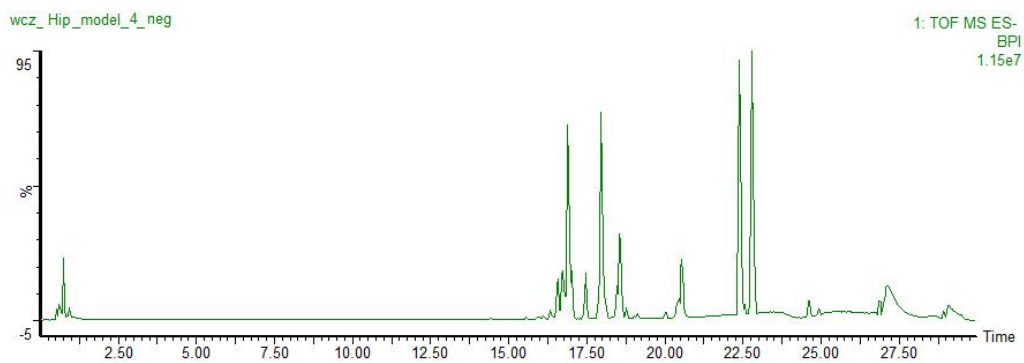
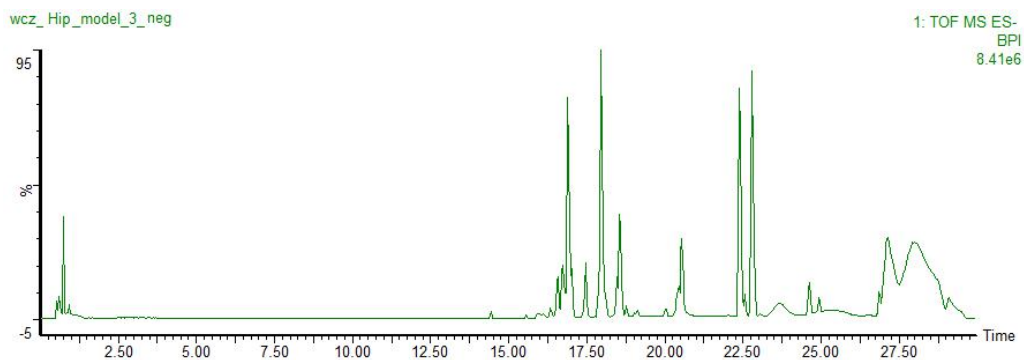
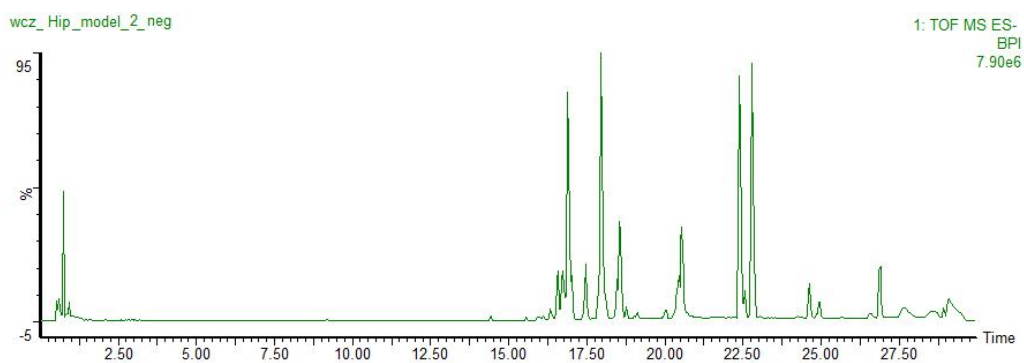
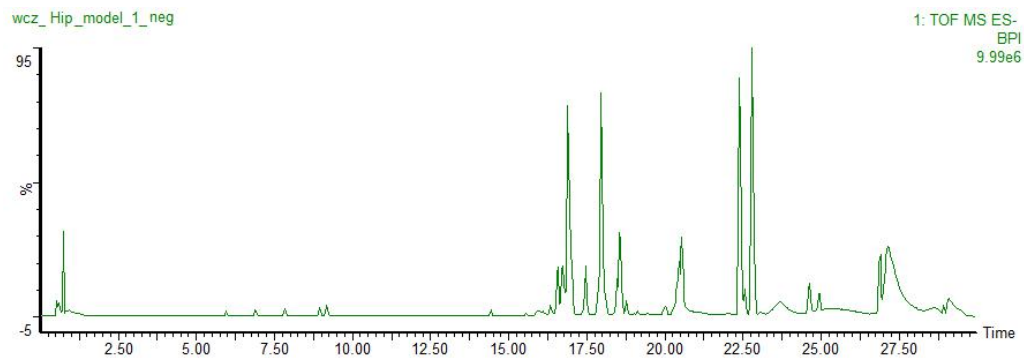


wcz_Hip_blank_8_neg

1: TOF MS ES-
BPI
7.73e6

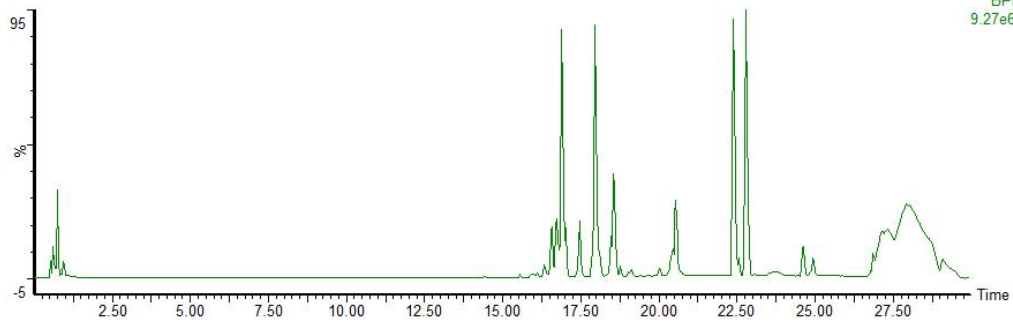


11. ESI-/ hip/ model group



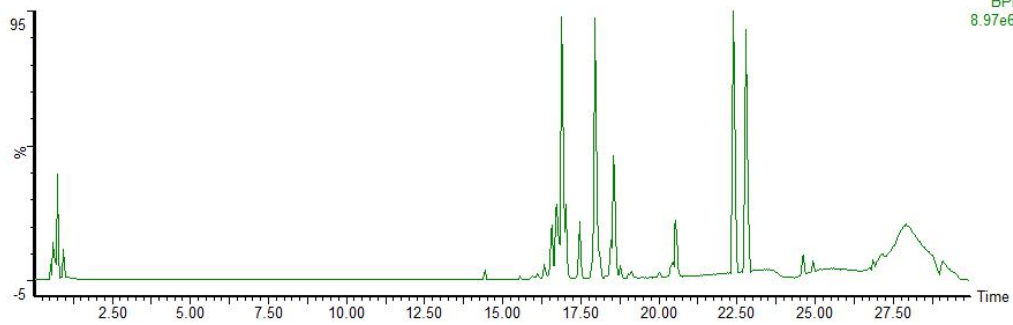
wcz_Hip_model_5_neg

1: TOF MS ES-
BPI
9.27e6



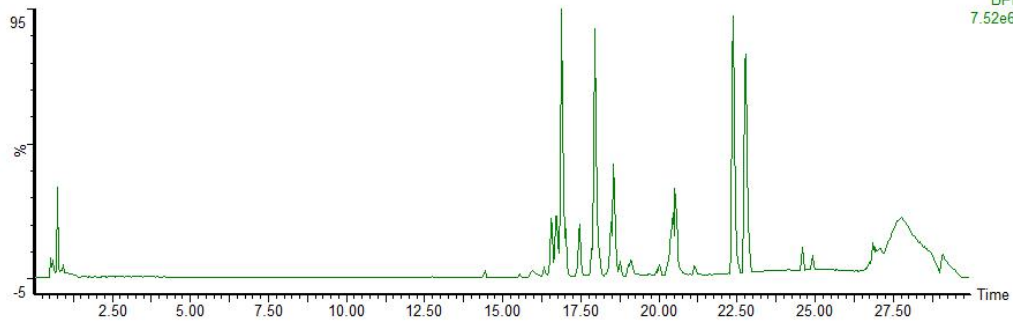
wcz_Hip_model_6_neg

1: TOF MS ES-
BPI
8.97e6



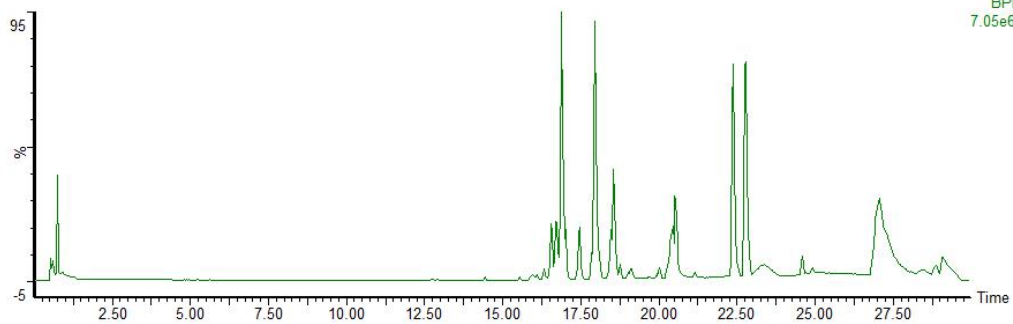
wcz_Hip_model_7_neg

1: TOF MS ES-
BPI
7.52e6

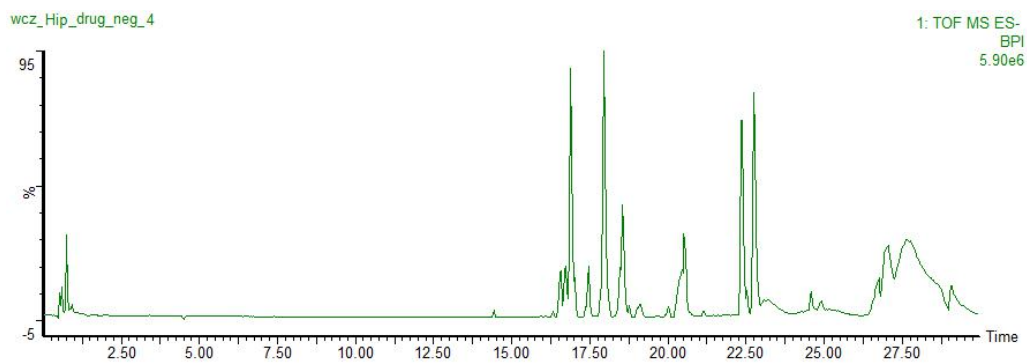
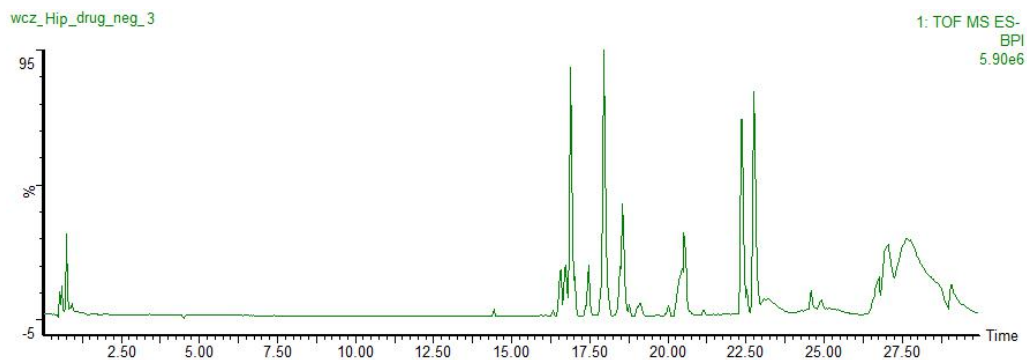
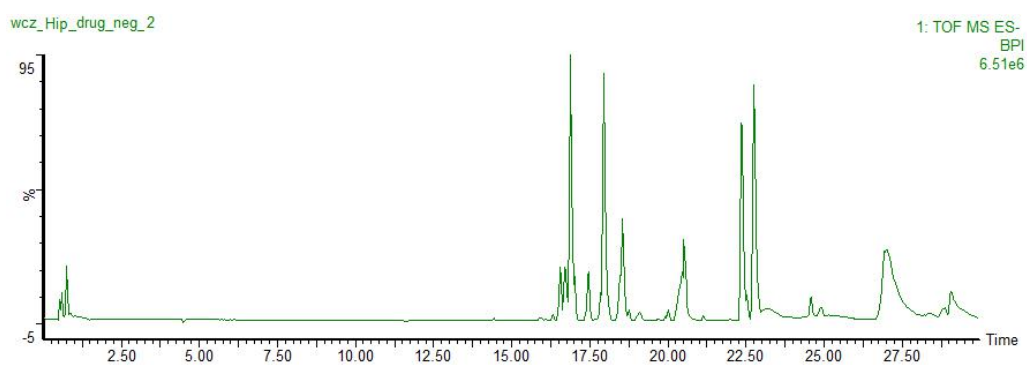
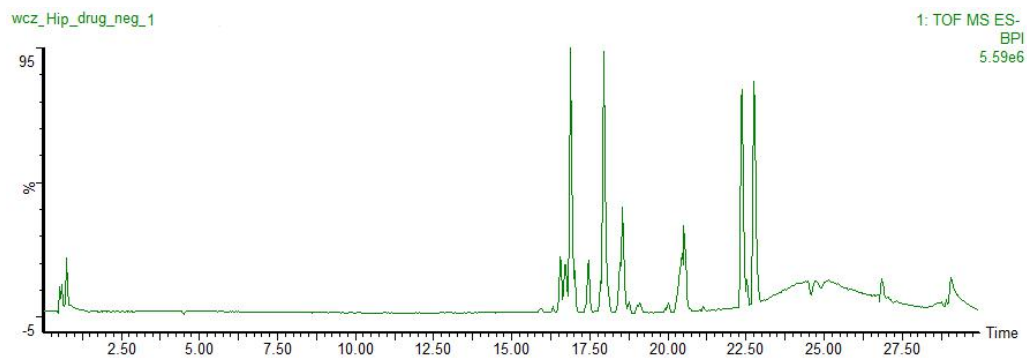


wcz_Hip_model_8_neg

1: TOF MS ES-
BPI
7.05e6

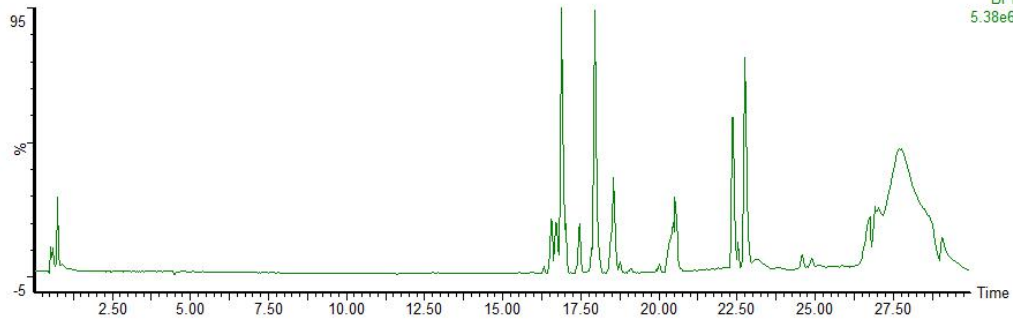


12. ESI-/ hip/ HPF group



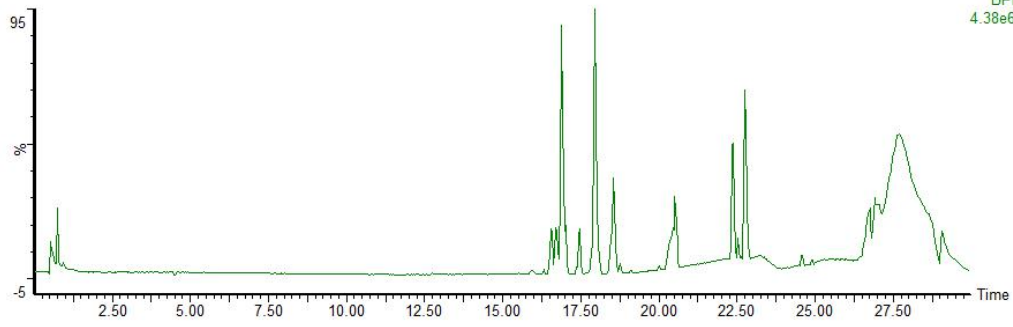
wcz_Hip_drug_neg_5

1: TOF MS ES-
BPI
5.38e6



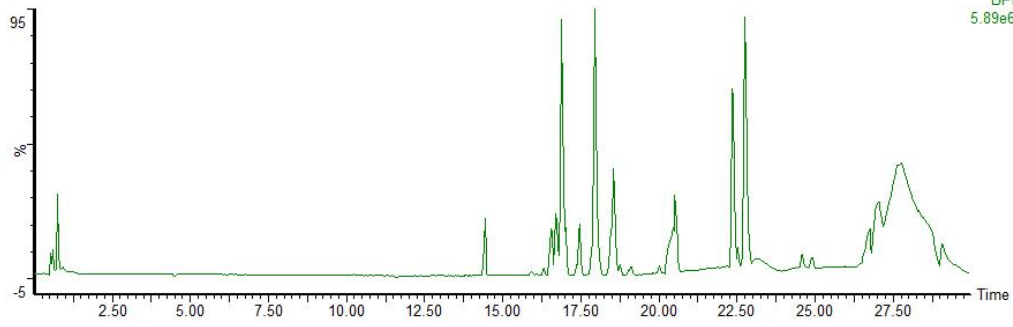
wcz_Hip_drug_neg_6

1: TOF MS ES-
BPI
4.38e6



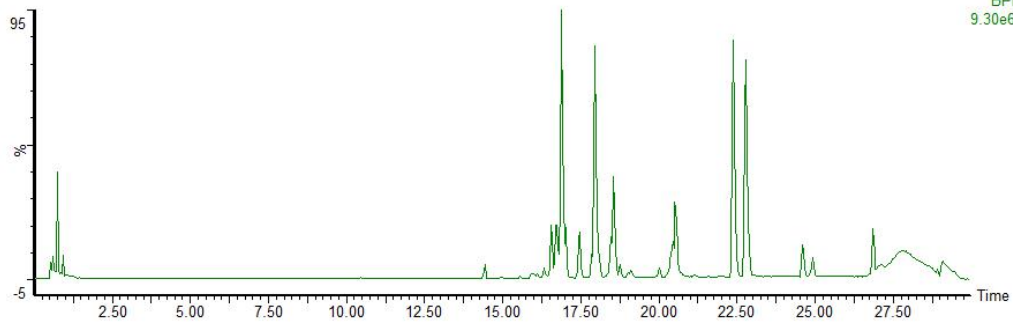
wcz_Hip_drug_neg_7

1: TOF MS ES-
BPI
5.89e6



wcz_Hip_drug_neg_8

1: TOF MS ES-
BPI
9.30e6



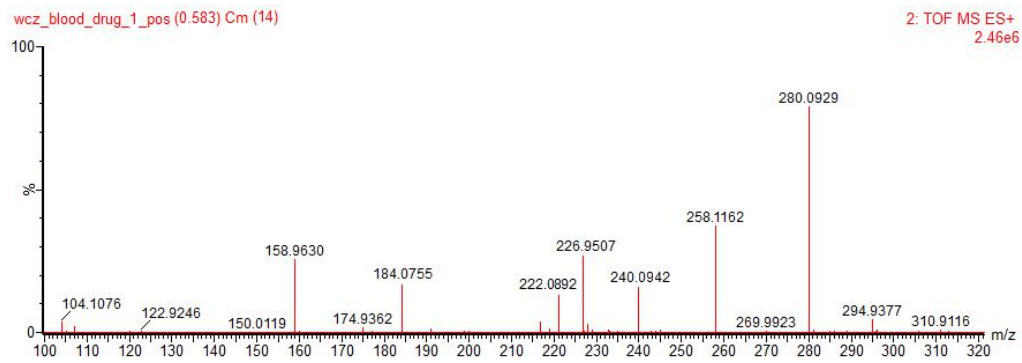
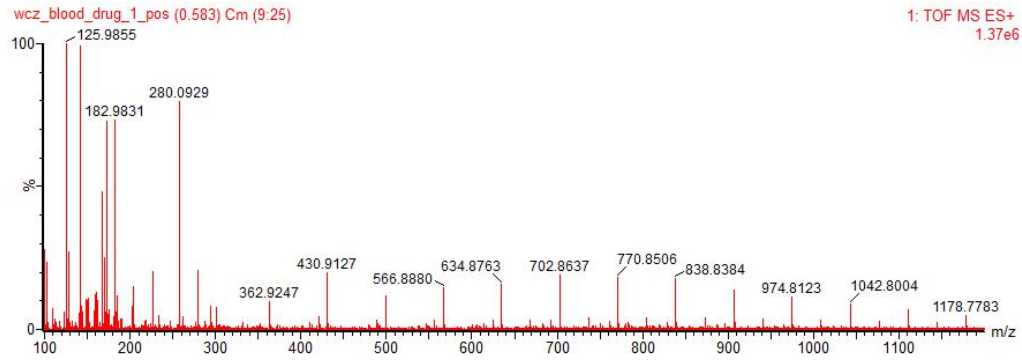
Supplementary Materials II

MS Spectra of Each Potential Biomarker in Function 1 (Low Energy) and Function 2 (High Energy)

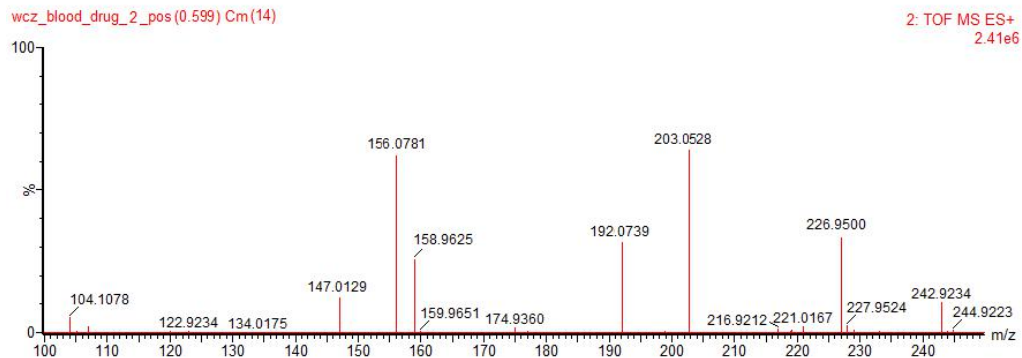
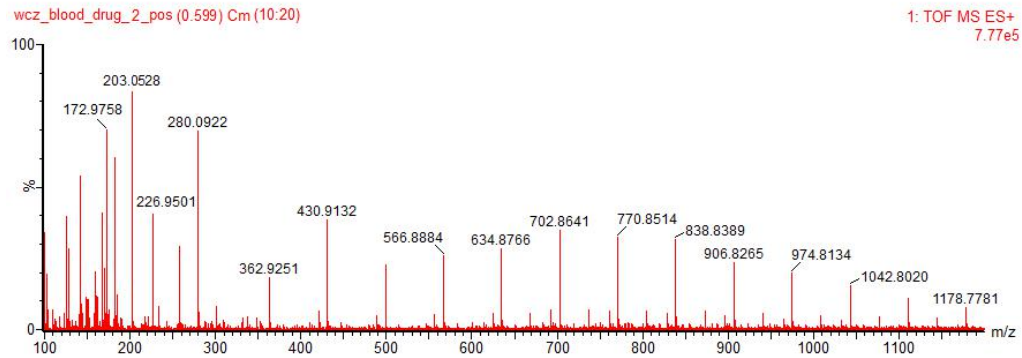
1. MS Spectra of *Glycerophosphocholine* in Function 1 and Function 2.
2. MS Spectra of *Myoinositol* in Function 1 and Function 2.
3. MS Spectra of α -*Ketoglutarate* in Function 1 and Function 2.
4. MS Spectra of *Glutathione* in Function 1 and Function 2. MS Spectra of *Citric Acid* in Function 1 and Function 2.
5. MS Spectra of *Oxidized Glutathione* in Function 1 and Function 2.
6. MS Spectra of *Pantetheine 4'-phosphate* in Function 1 and Function 2.
7. MS Spectra of *Pantothenic acid* in Function 1 and Function 2.
8. MS Spectra of *L-Tryptophan* in Function 1 and Function 2.
9. MS Spectra of *Indoleacetaldehyde* in Function 1 and Function 2.
10. MS Spectra of *Phytosphingosin* in Function 1 and Function 2.
11. MS Spectra of *Sphinganine* in Function 1 and Function 2.
12. MS Spectra of *Sphingosine 1-phosphate* in Function 1 and Function 2.
13. MS Spectra of *Sphinganine 1-phosphate* in Function 1 and Function 2.
14. MS Spectra of *Leukotriene A4* in Function 1 and Function 2.
15. MS Spectra of *12,13-EpOME* in Function 1 and Function 2.
16. MS Spectra of *19 (S)-HETE* in Function 1 and Function 2.
17. MS Spectra of *LysoPC (18:1(9Z))* in Function 1 and Function 2.

18. MS Spectra of 18:1/18:3 *phosphatidylcholine* in Function 1 and Function 2.
19. MS Spectra of *Arachidonic acid* in Function 1 and Function 2.
20. MS Spectra of *Linoleic acid* in Function 1 and Function 2.
21. MS Spectra of *20-Hydroxy-leukotriene B4* in Function 1 and Function 2.
22. MS Spectra of 18:1/18:2 *phosphatidylcholine* in Function 1 and Function 2.
23. MS Spectra of 32 *Pantetheine 4'-phosphate* in Function 1 and Function 2.
24. MS Spectra of *Lactosylceramide* in Function 1 and Function 2.
25. MS Spectra of 18:2/18:3 *phosphatidylcholine* in Function 1 and Function 2.
26. MS Spectra of *SM (d18:0/16:1)* in Function 1 and Function 2.
27. MS Spectra of 16:0/18:1 *phosphatidylcholine* in Function 1 and Function 2.
28. MS Spectra of 18:2/18:1 *phosphatidylcholine* in Function 1 and Function 2.

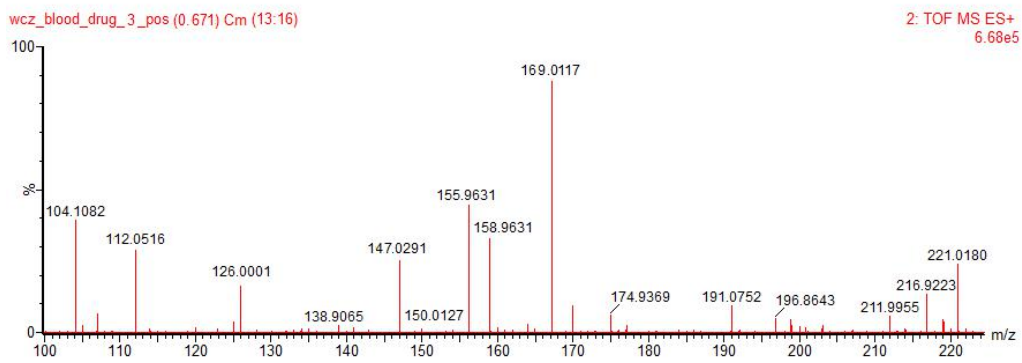
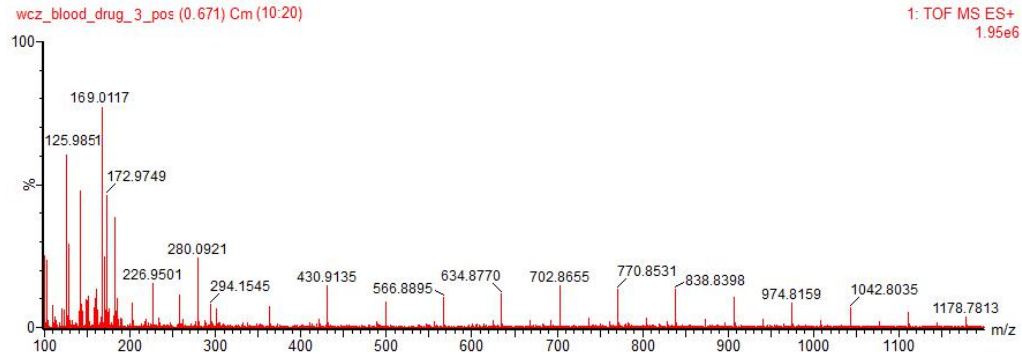
1. MS Spectra of Glycerophosphocholine in Function 1 and Function 2



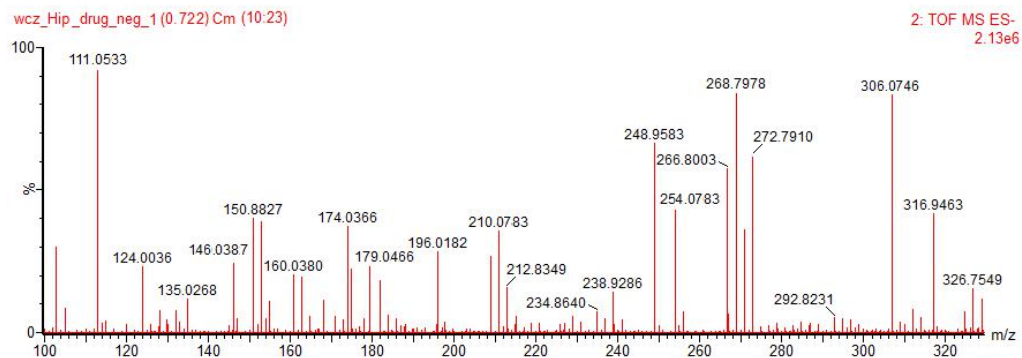
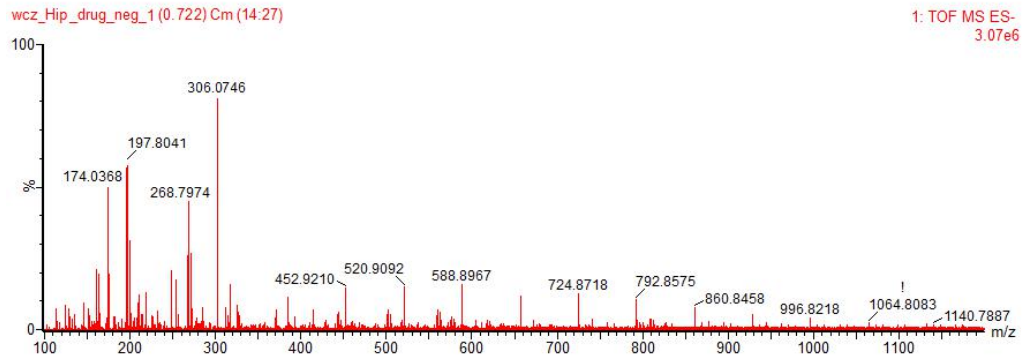
2. MS Spectra of Myoinositol in Function 1 and Function 2



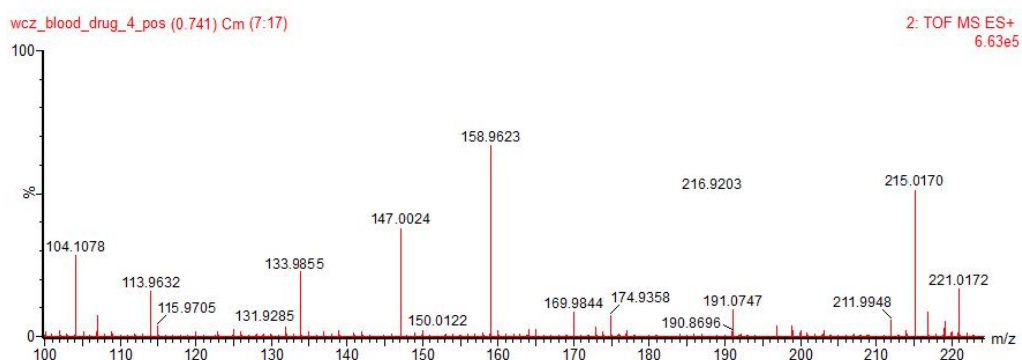
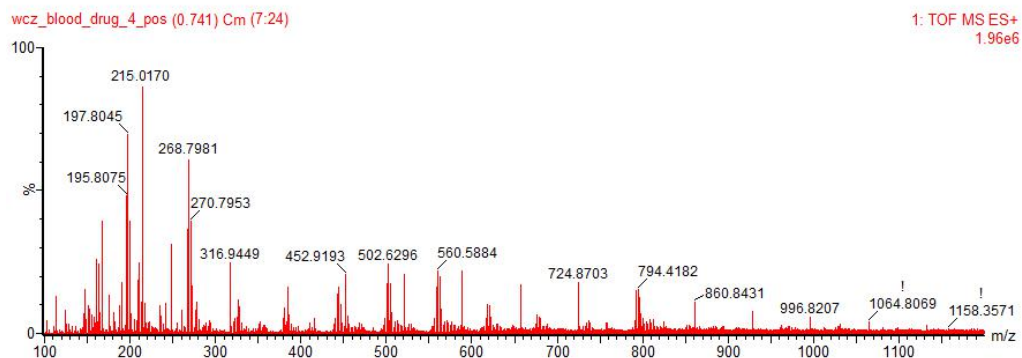
3. MS Spectra of α -Ketoglutarate in Function 1 and Function 2



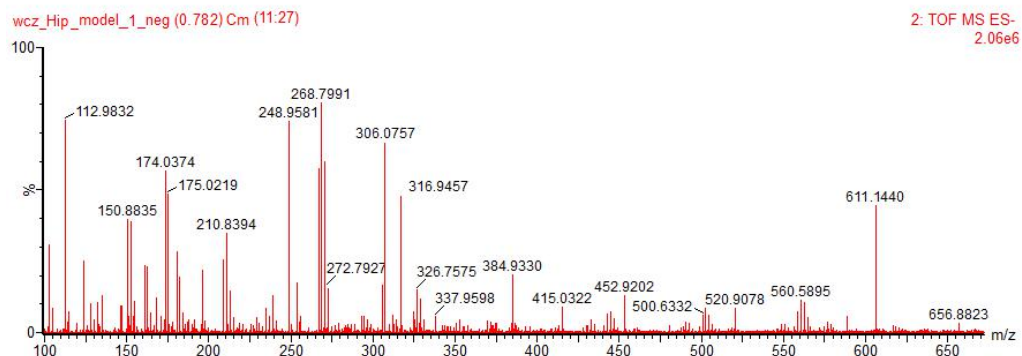
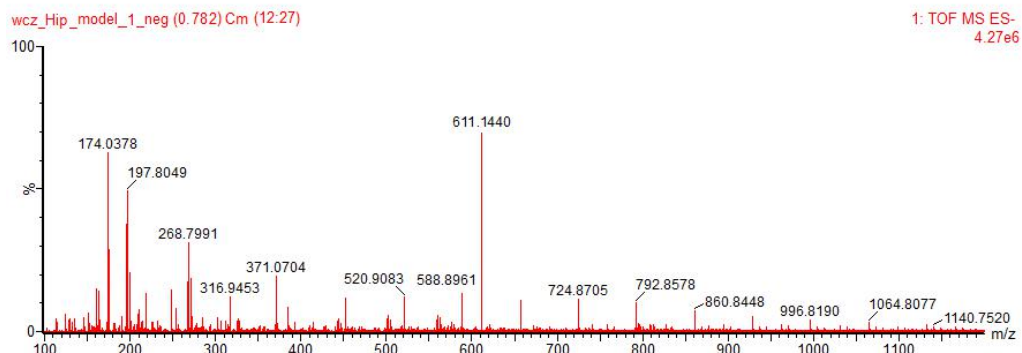
4. MS Spectra of Glutathione in Function 1 and Function 2



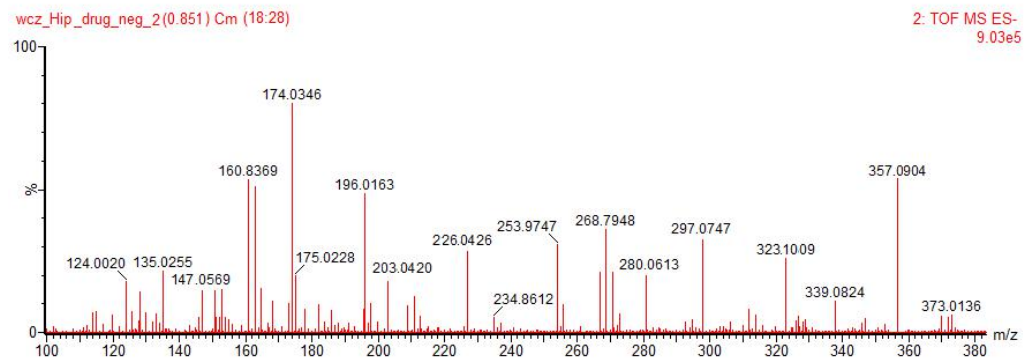
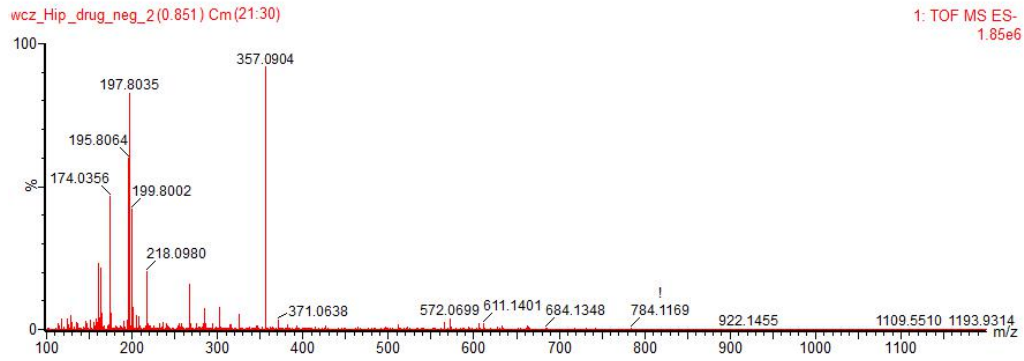
5. MS Spectra of Citric acid in Function 1 and Function 2



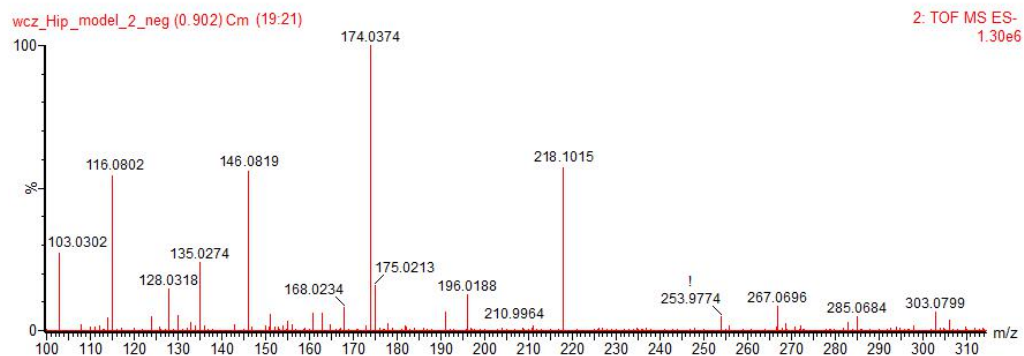
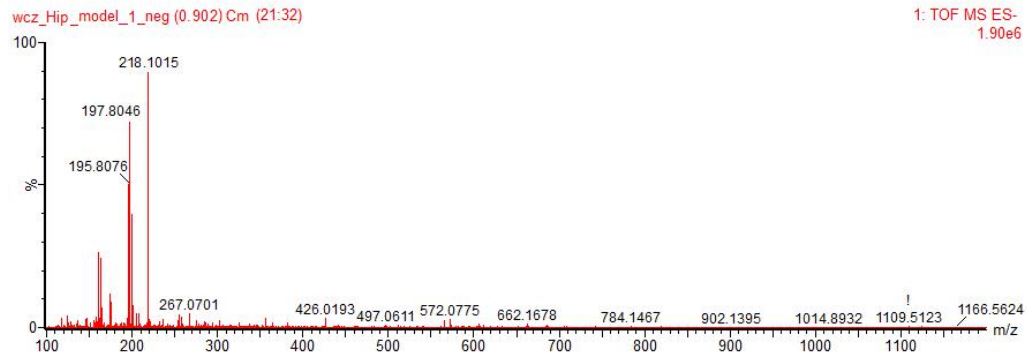
6. MS Spectra of Oxidized glutathione in Function 1 and Function 2



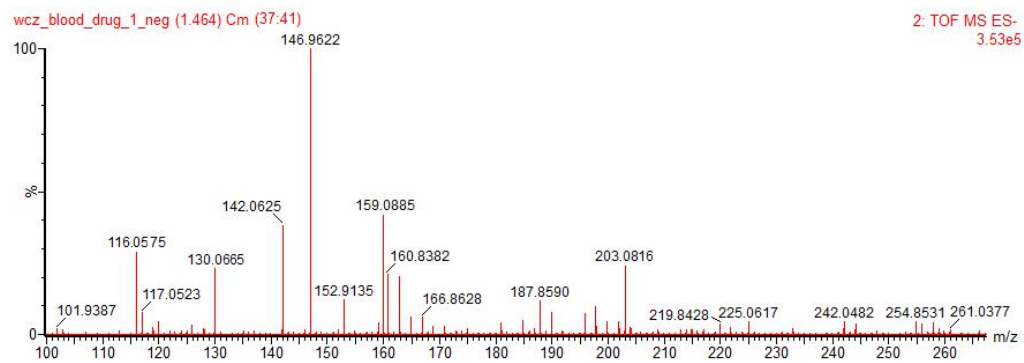
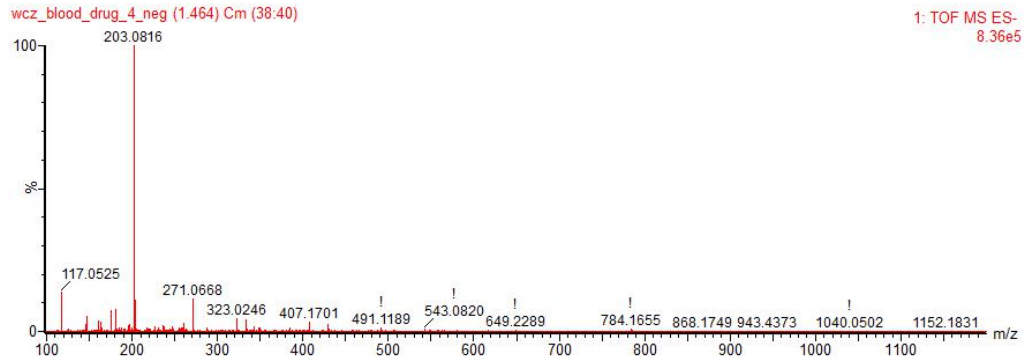
7. MS Spectra of Pantetheine 4'-phosphate in Function 1 and Function 2



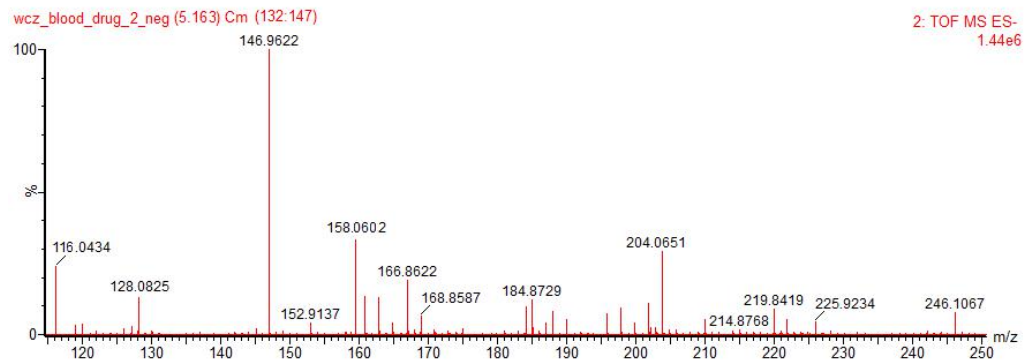
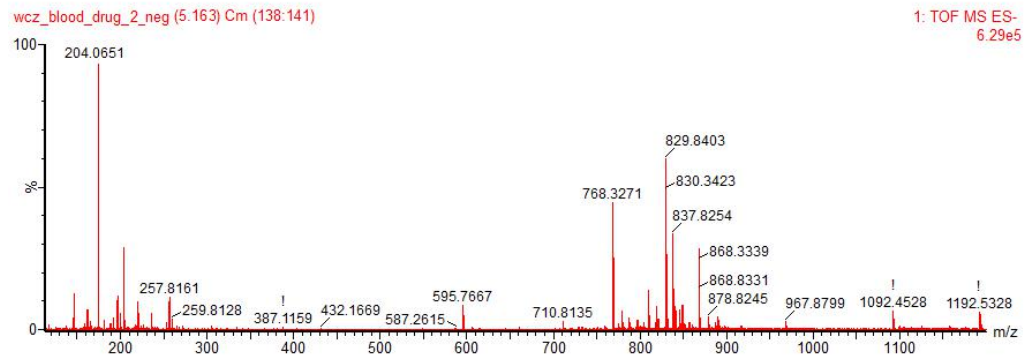
8. MS Spectra of Pantothenic acid in Function 1 and Function 2



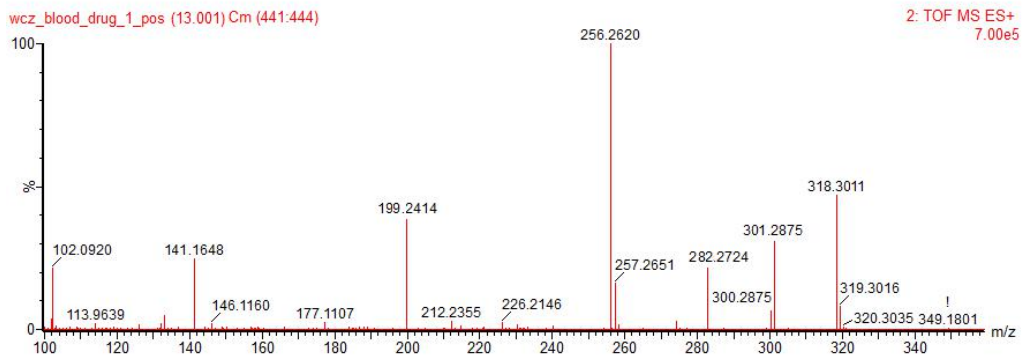
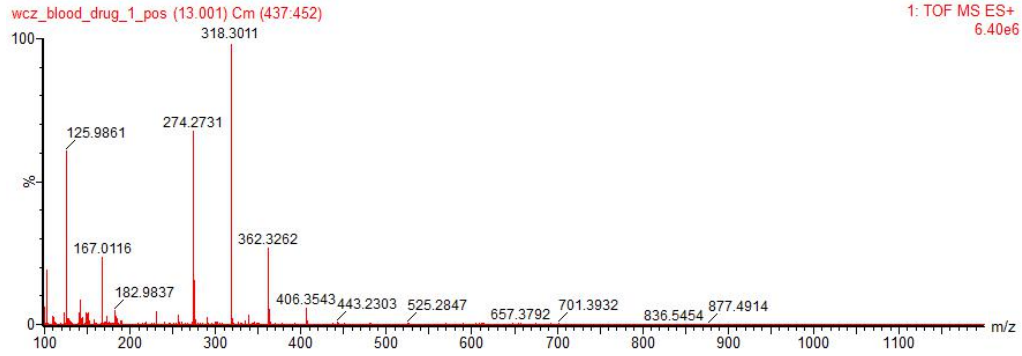
9. MS Spectra of L-Tryptophan in Function 1 and Function 2



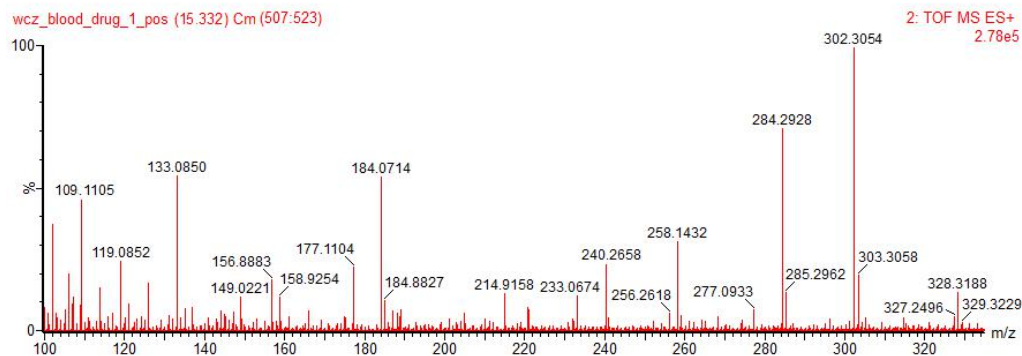
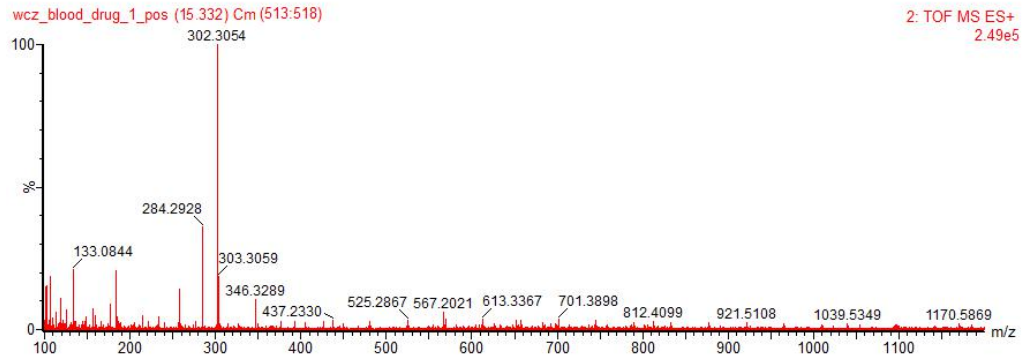
10. MS Spectra of Indoleacetaldehyde in Function 1 and Function 2



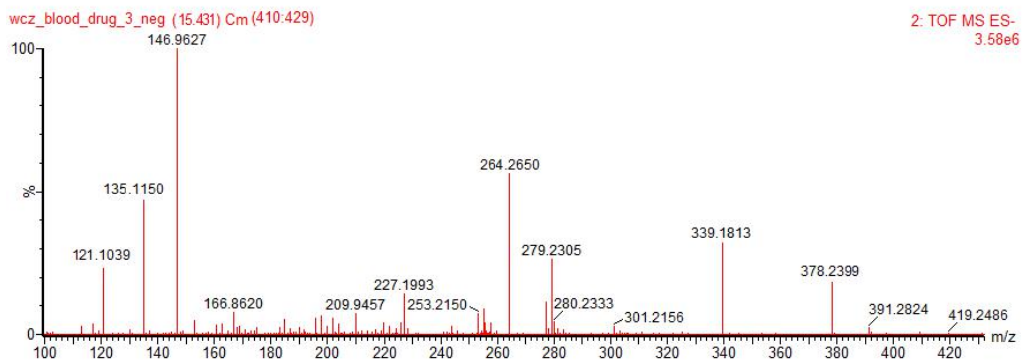
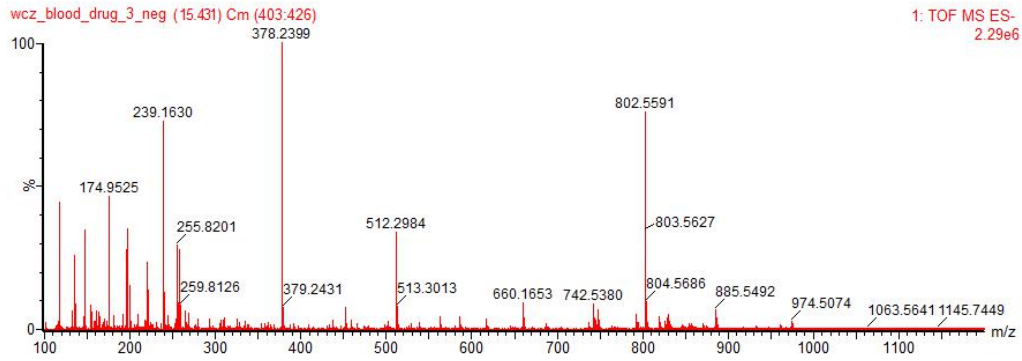
11. MS Spectra of Phytosphingosine in Function 1 and Function 2



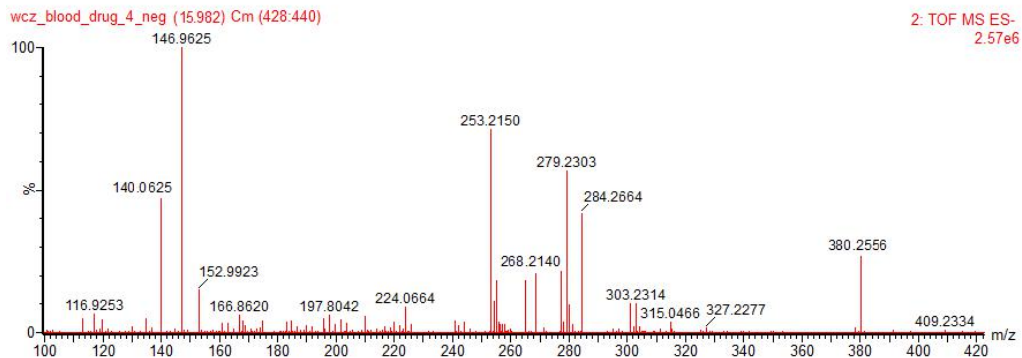
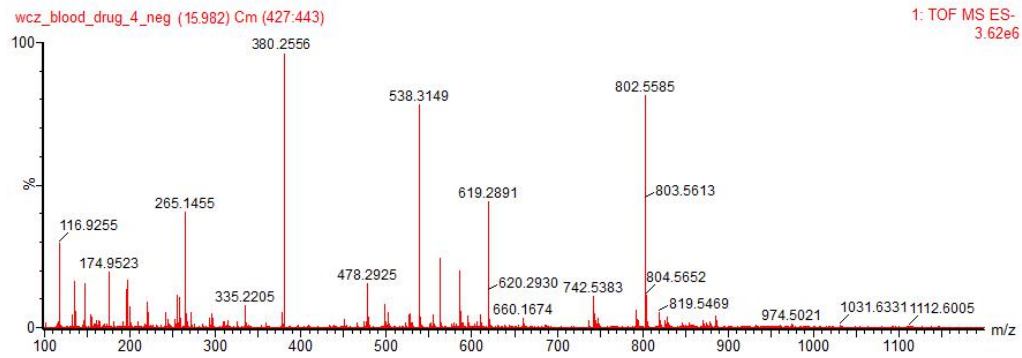
12. MS Spectra of Sphinganine in Function 1 and Function 2



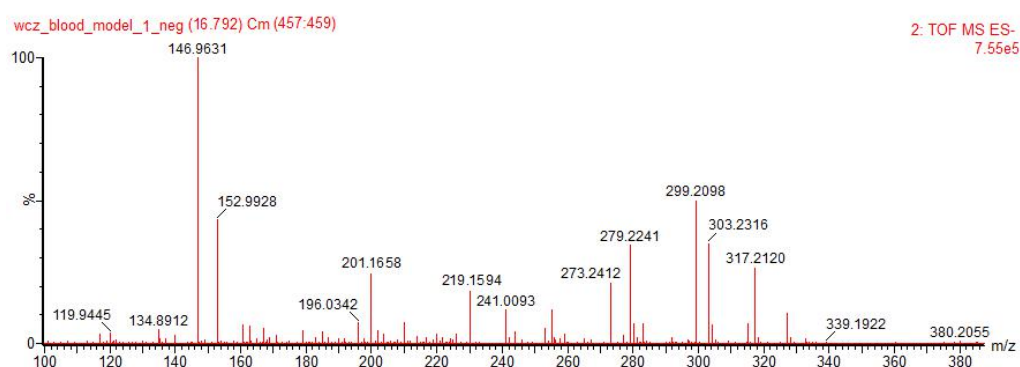
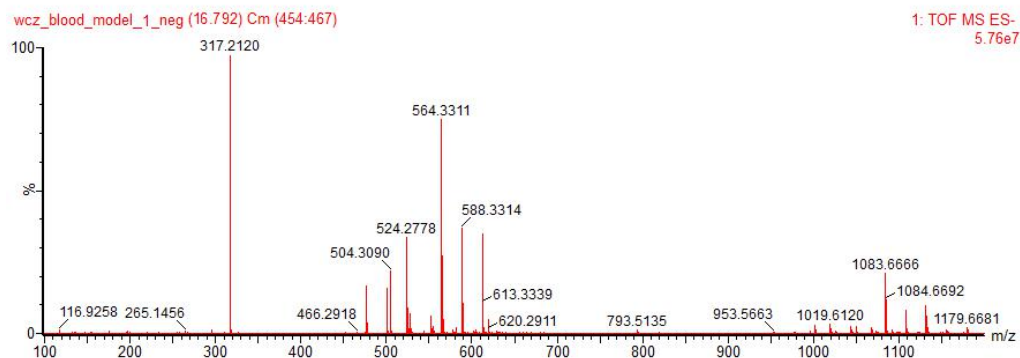
13. MS Spectra of Sphingosine 1-phosphate in Function 1 and Function 2



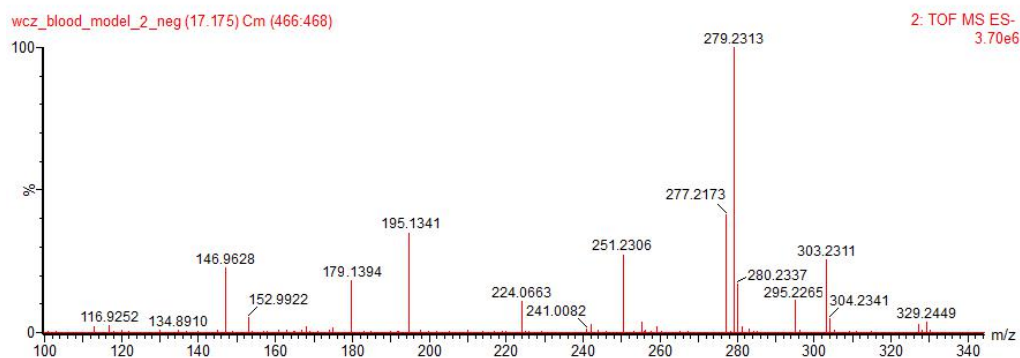
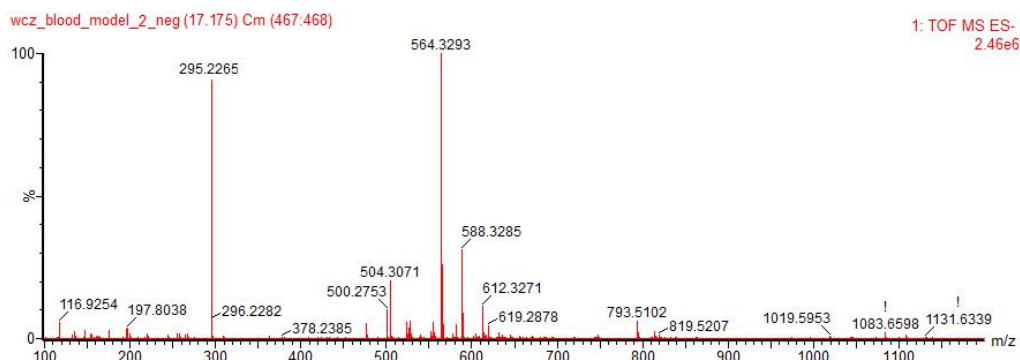
14. MS Spectra of Sphinganine 1-phosphate in Function 1 and Function 2



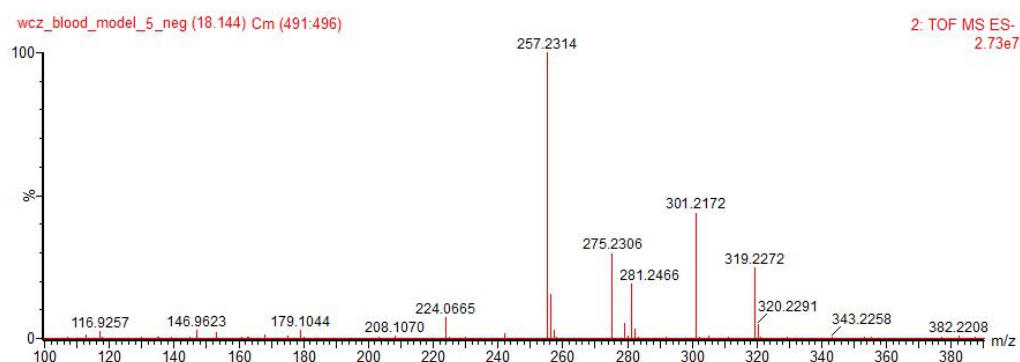
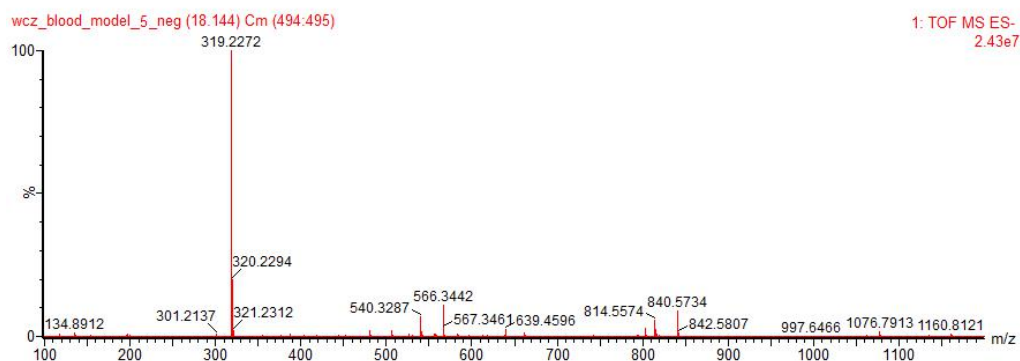
15. MS Spectra of Leukotriene A4 in Function 1 and Function 2



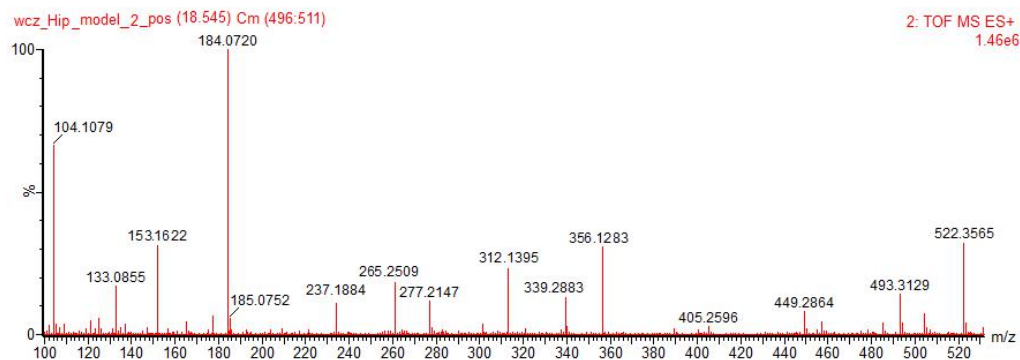
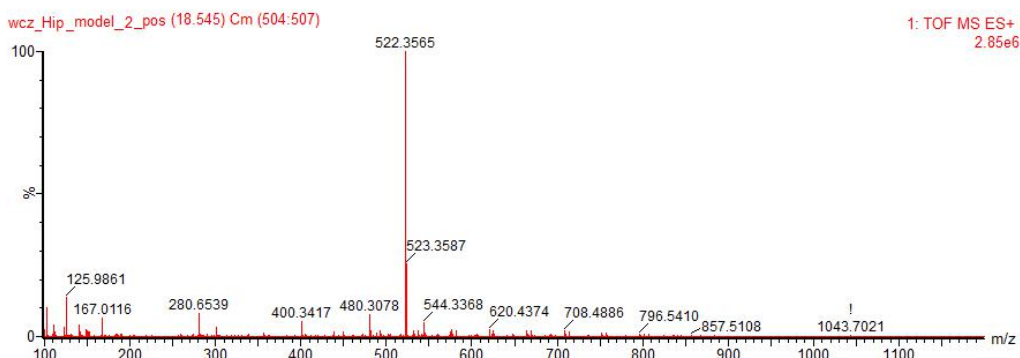
16. MS Spectra of 12,13-EpOME in Function 1 and Function 2



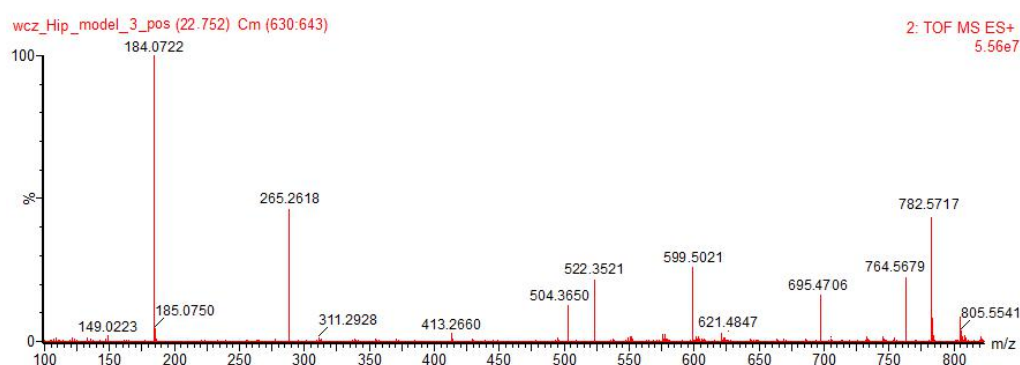
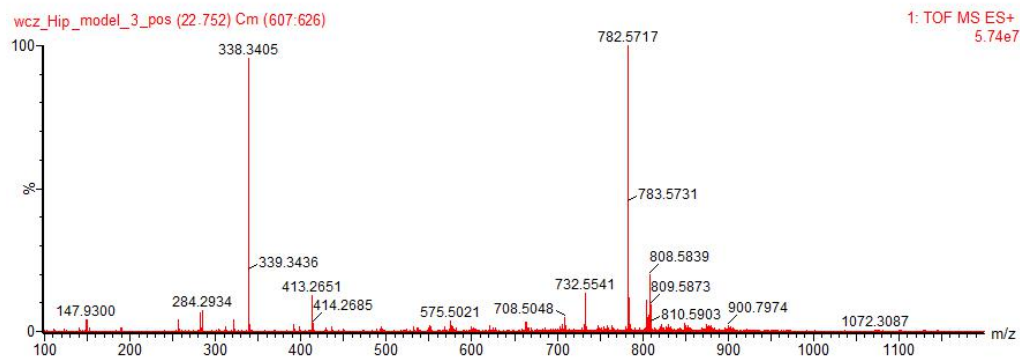
17. MS Spectra of 19 (S)-HETE in Function 1 and Function 2



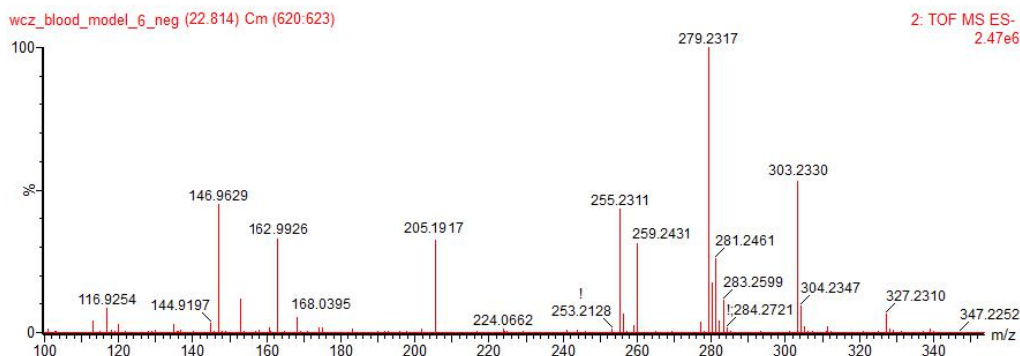
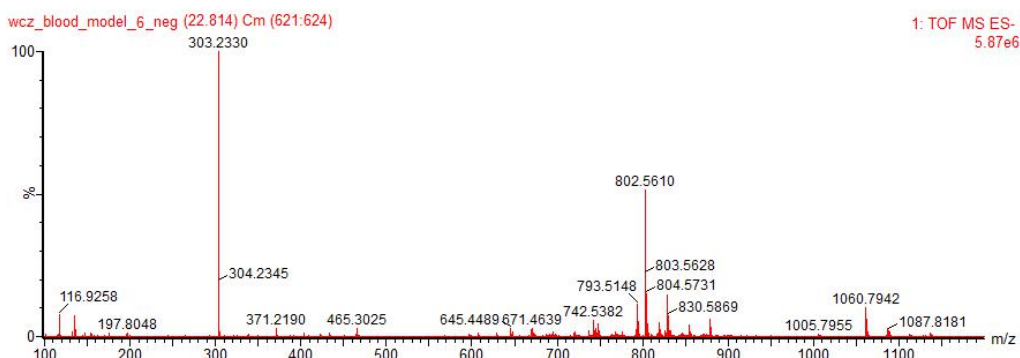
18. MS Spectra of LysoPC (18:1(9Z)) in Function 1 and Function 2



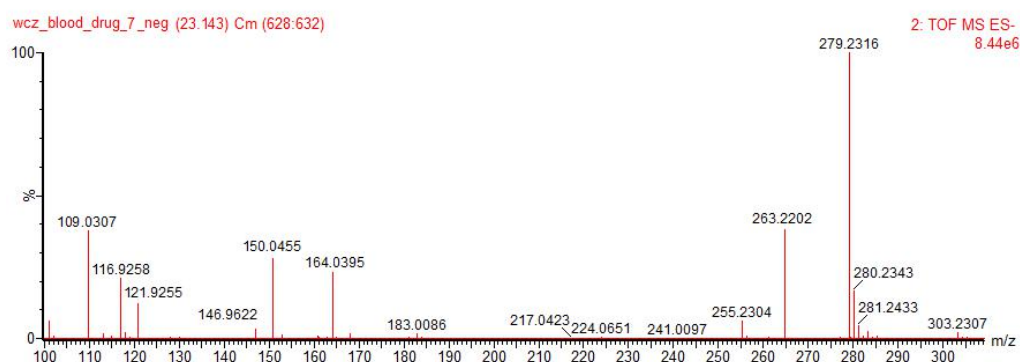
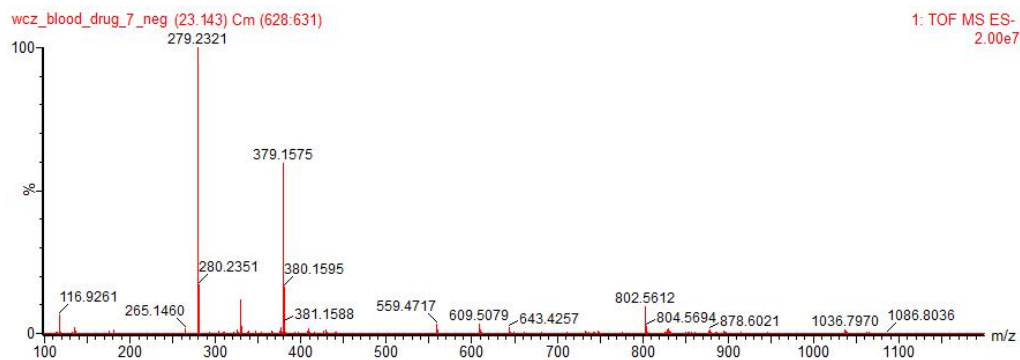
19. MS Spectra of 18:1/18:3 phosphatidylcholine in Function 1 and Function 2



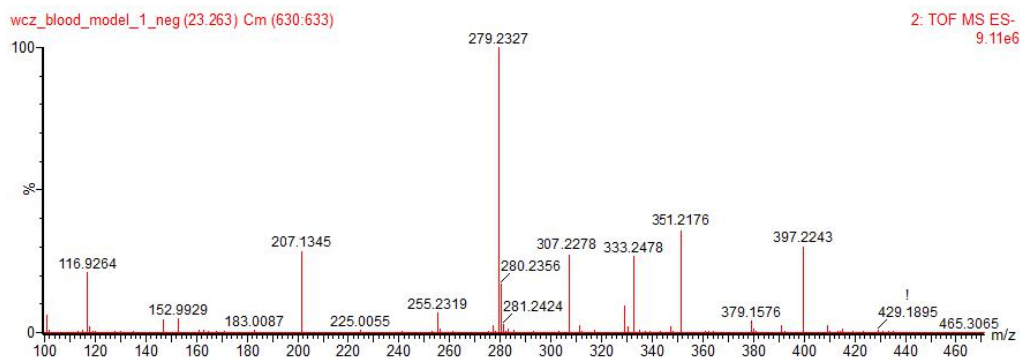
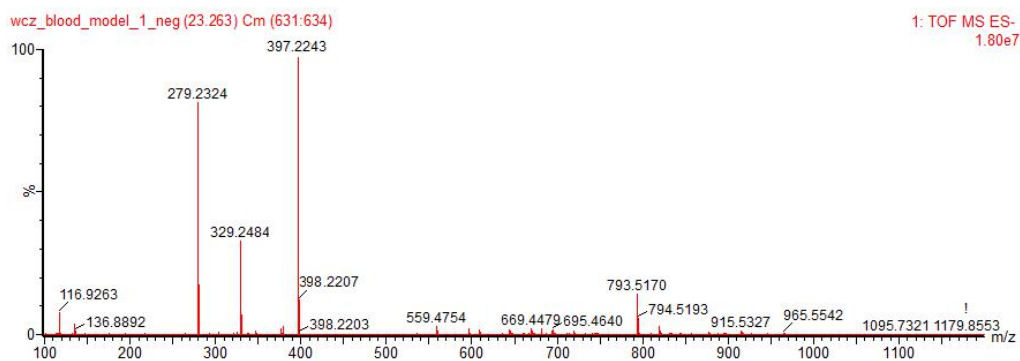
20. MS Spectra of Arachidonic acid in Function 1 and Function 2



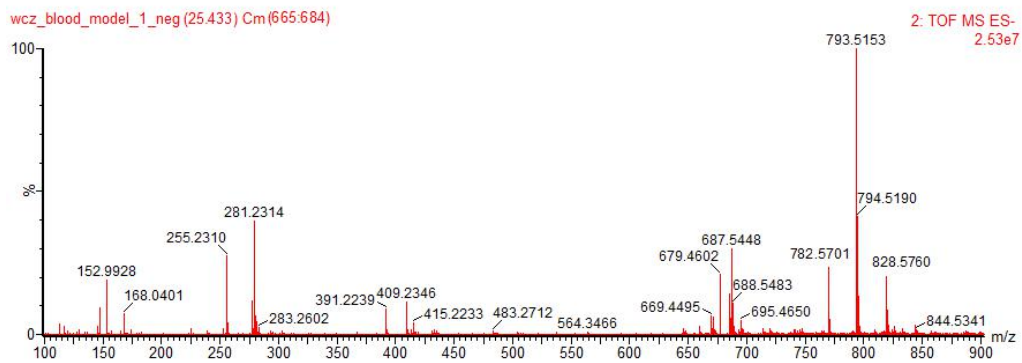
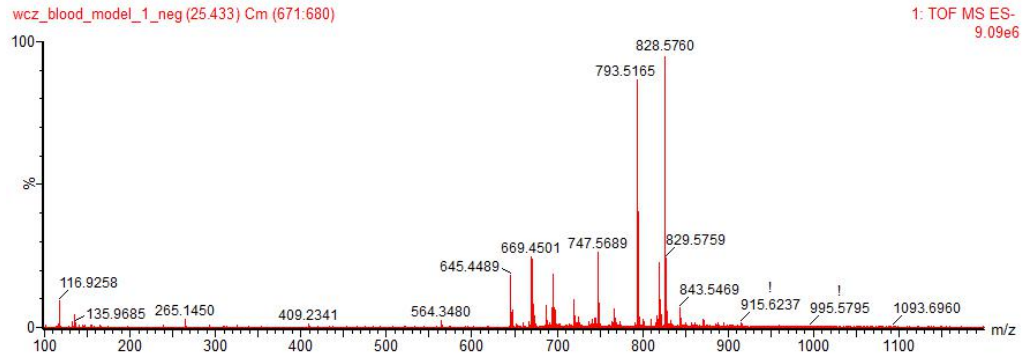
21. MS Spectra of Linoleic acid in Function 1 and Function 2



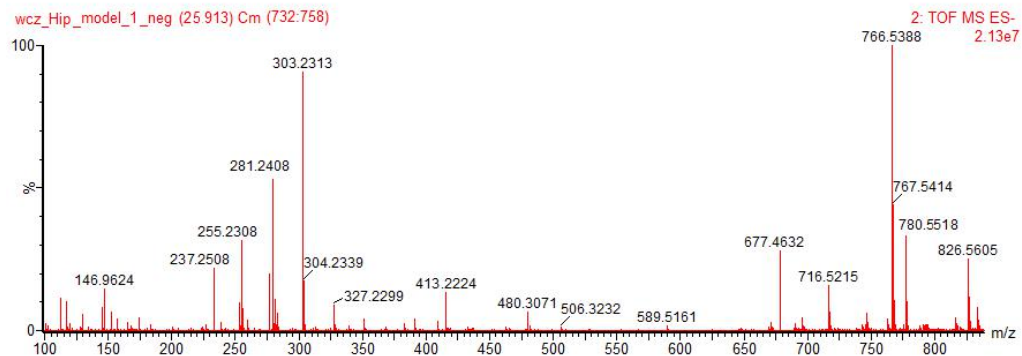
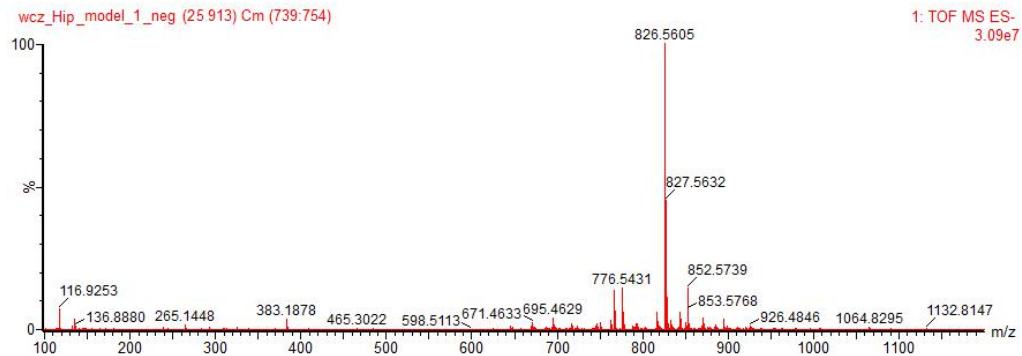
22. MS Spectra of 20-Hydroxy-leukotriene B4 in Function 1 and Function 2



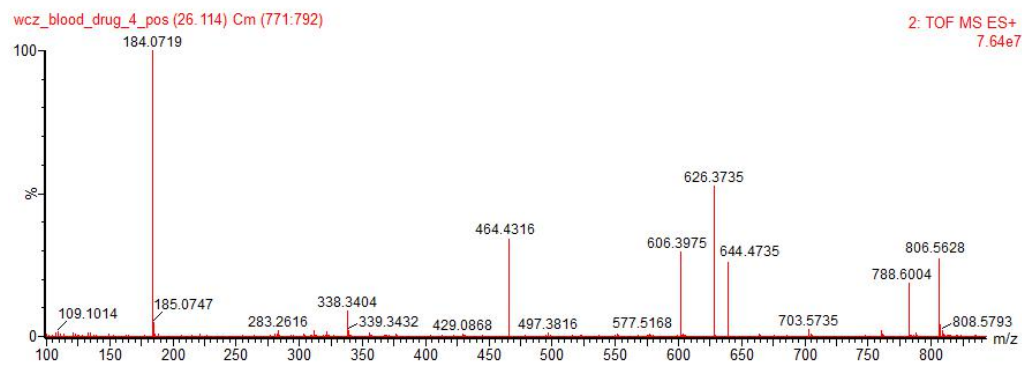
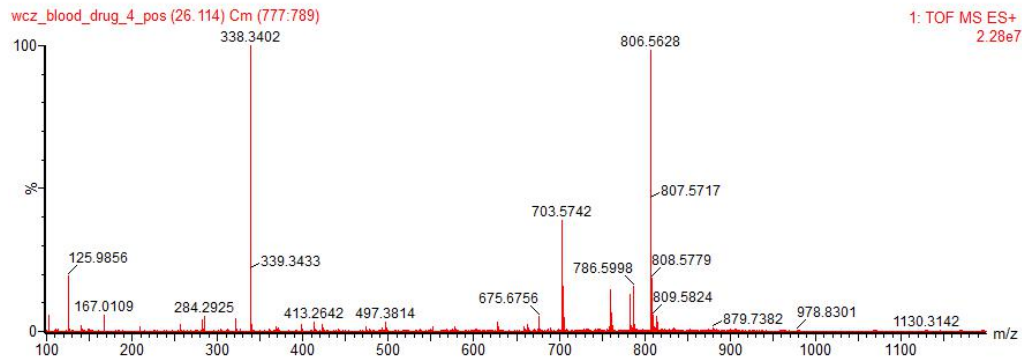
23. MS Spectra of 18:1/18:2 phosphatidylcholine in Function 1 and Function 2



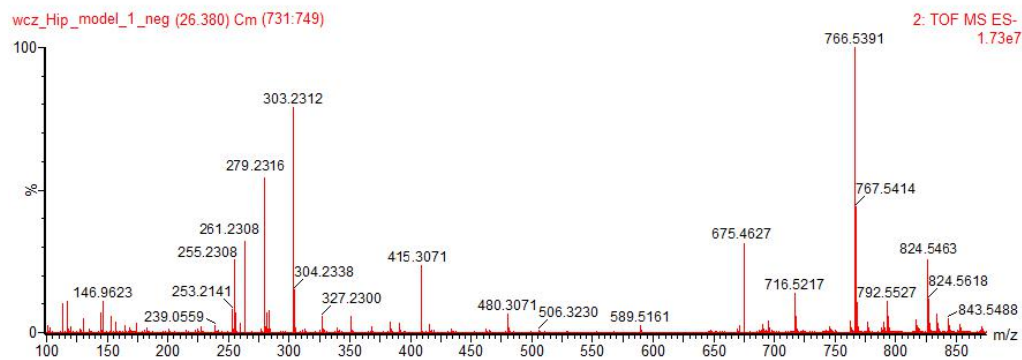
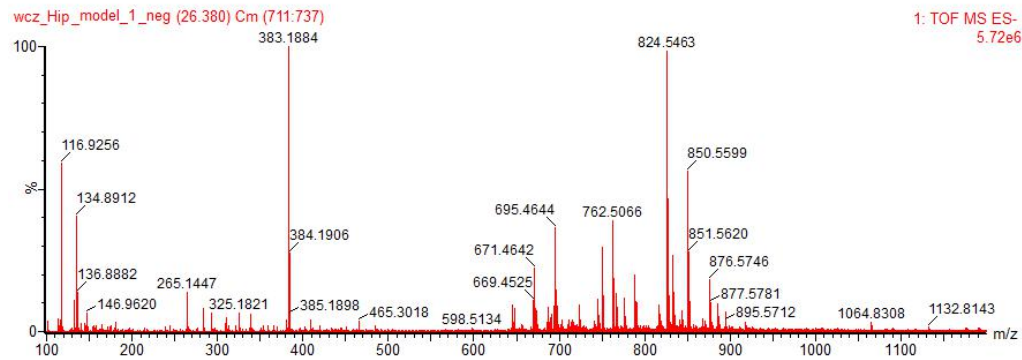
24. MS Spectra of Pantetheine 4'-phosphate in Function 1 and Function 2



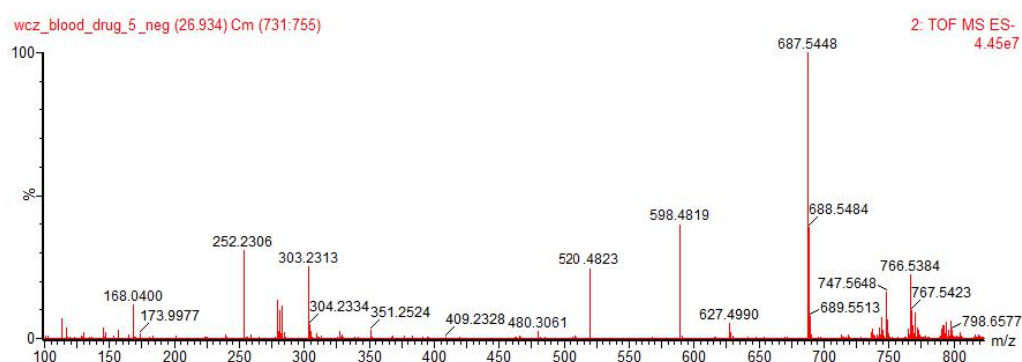
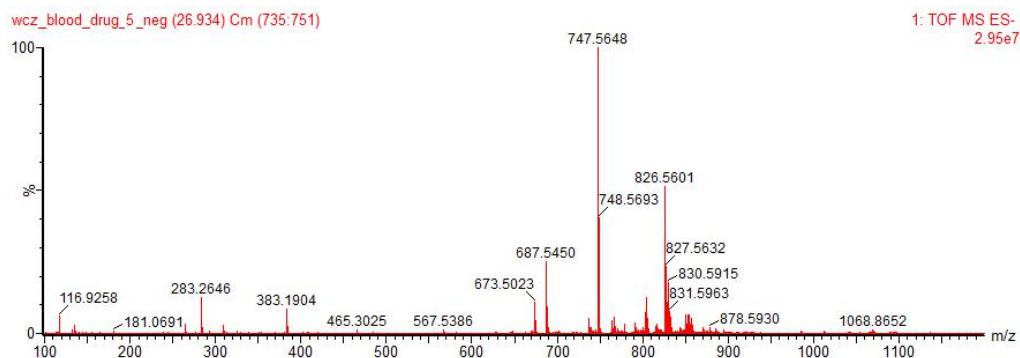
25. MS Spectra of Lactosylceramide in Function 1 and Function 2



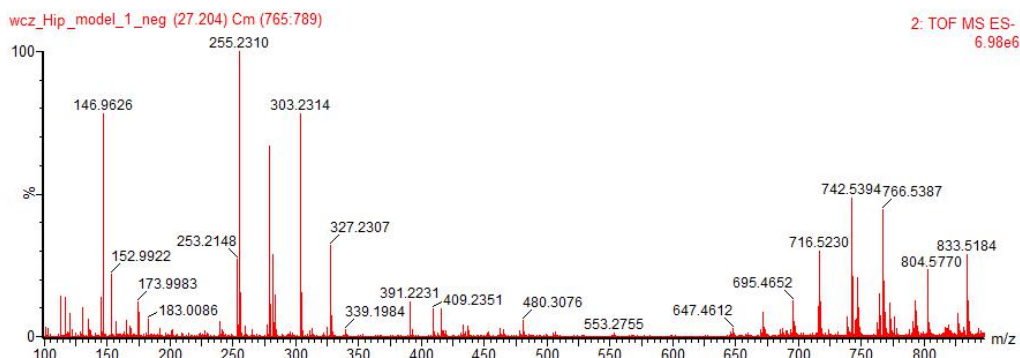
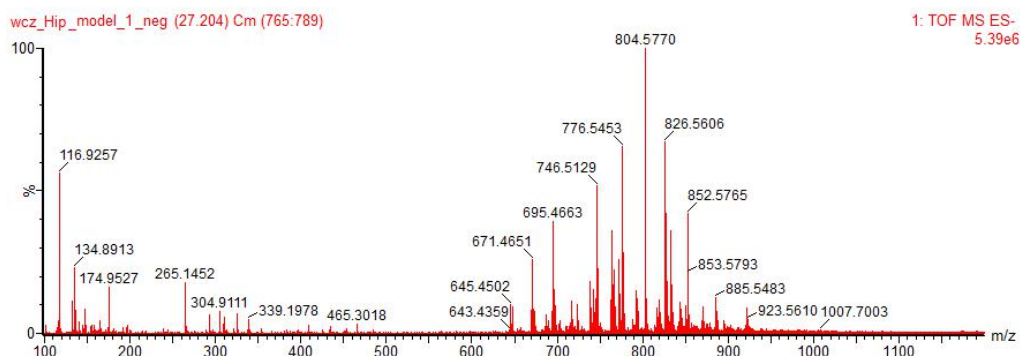
26. MS Spectra of 18:2/18:3 phosphatidylcholine in Function 1 and Function 2



27. MS Spectra of SM (d18:0/16:1) in Function 1 and Function 2



28. MS Spectra of 16:0/18:1 phosphatidylcholine in Function 1 and Function 2



29. MS Spectra of 18:2/18:1 phosphatidylcholine in Function 1 and Function 2

