**Supplemental Table S2.8. Venn Diagram Identifications All Healthy NP-BCs Compared to Corresponding Obese NP-BCs**

Comparison of Lipids Associated with PVP 100 nm AuNPs Following Incubation in Healthy or Obese Human Serum

In Common

Unknown\_scan13\_50

Unknown\_scan13\_21

Unknown\_scan13\_49

Arachidyl carnitine, O-[(9Z)-17-carboxyheptadec-9-enoyl]carnitine

Palmitoylcarnitine, (5Z)-13-carboxytridec-5-enoylcarnitine

Unknown\_scan13\_43

Unknown\_scan13\_16

(5Z,8Z)-tetradecadienoylcarnitine

18:2 Cholesteryl ester, zymosteryl oleate, 16:1 Stigmasteryl ester, 16:2 Sitosteryl ester

18:1 Cholesteryl ester, 16:0 Stigmasteryl ester, 16:1 Sitosteryl ester

17:1 Campesteryl ester

Unknown\_scan15\_23

18:3 Cholesteryl ester, 16:2 Stigmasteryl ester, 16:3 Sitosteryl ester

Unknown\_scan15\_22

20:4 Cholesteryl ester, 18:3 Stigmasteryl ester

15:1 Campesteryl ester

16:1 Cholesteryl ester

Unknown\_scan15\_25

20:5 Cholesteryl ester

20:3 Cholesteryl ester, 18:2 Stigmasteryl ester, 18:3 Sitosteryl ester

16:0 Cholesteryl ester

15:0 Campesteryl ester

Cer(d18:1/24:0)

Unknown\_scan12\_12

Unknown\_scan12\_14

PC (34:2); PCo(35:2)

SM (d18:1/16:0)

PC (34:1); PCo(35:1)

PC (36:2); PCo(37:2)

SM (d18:1/20:0)

PC (30:1)

PC (36:3); PCo(37:3)

PC (36:4); PCo(37:4)

SM (d18:0/20:0)

SM (d16:1/24:0)

PC (36:1); PCo(37:1)

SM (d16:1/24:1)

SM (d18:1/24:1)15Z))

PC (38:4); PCo(39:4)

SM (d18:1/18:0)

PC (38:2); PCo(39:2)

PC (38:3); PCo(39:3)

SM (d18:2/22:1)

SM (d18:1/14:0)

SM (d16:1/18:1)

SM (d18:1/24:0)

SM (d18:0/16:0)

SM (d18:2/24:1)

Unknown\_scan1\_22

PC (32:1); PCo(33:1)

PC (38:1)

PC (36:8)

PC (34:0); PCo(35:0)

SM (d18:1/18:1)9Z))

PC (30:2)

SM (d16:1/22:1)

PC (32:0); PCo(33:0)

PCo(36:1); PC (35:1)

PC (38:8)

PC (38:5); PCo(39:5)

PC (38:6); PCo(39:6)

PC (38:9)

PC (32:2)

PC (30:0)

SM (d18:0/22:0)

PCo(38:2); PC (37:2)

PCo(36:2); PC (35:2)

Unknown\_scan1\_19

SM (d18:0/18:0)

PCo(34:2)

PCo(38:3); PC (37:3)

PCo(34:1); PC (33:1)

PCo(38:1)

PC (36:0); PCp(38:6); PCo(37:0)

Unknown\_scan1\_9

PC (34:3); PCo(35:3)

PCo(36:4)

Unknown\_scan1\_6

Unknown\_MRM\_PCandSM\_2

PCo(38:4); PC (37:4)

Unknown\_scan1\_3

Unknown\_scan1\_25

PCo(32:1)

PCo(34:3)

PCo(36:3); PC (35:3)

Unknown\_scan1\_26

PC (36:5); PCo(37:5)

PC (40:6); PCo(41:6)

PCo(32:0)

PCo(38:5); PC (37:5)

Unknown\_scan1\_15

PCo(36:5)

Unknown\_scan1\_16

PC (40:5); PCo(41:5)

SM (d18:0/14:0)

SM (d18:2/14:0)

PCo(34:0); PC (33:0)

Unknown\_scan1\_24

Unknown\_scan1\_13

SM (d18:1/12:0)

TAG(50:2)\_FA 16:0

TAG(52:2)\_FA 16:0

TAG(52:2)\_FA 18:1

TAG(52:3)\_FA 18:1

TAG(52:3)\_FA 16:0

TAG(54:3)\_FA 18:1

TAG\_15:0\_16

TAG(52:3)\_FA 18:2

TAG(50:3)\_FA 16:0

TAG(52:1)\_FA 18:1

TAG(52:1)\_FA 18:0

TAG(54:4)\_FA 18:1

TAG(50:2)\_FA 18:1

TAG(52:1)\_FA 16:0

TAG(50:3)\_FA 18:1

TAG(52:4)\_FA 18:2

TAG(50:3)\_FA 18:2

TAG(52:4)\_FA 16:0

TAG(54:2)\_FA 18:1

TAG(54:4)\_FA 18:2

TAG(52:2)\_FA 18:0

TAG(54:3)\_FA 18:0

TAG(54:2)\_FA 18:0

TAG(54:5)\_FA 18:2

TAG(52:2)\_FA 18:2

TAG(54:3)\_FA 18:2

TAG(50:3)\_FA 16:1

PS (28:0)

Unknown\_scan23\_12

Unknown\_scan22\_10

Unknown\_scan23\_13

Unknown\_scan19\_34

Unknown\_scan19\_33

Unknown\_scan23\_39

Unknown\_scan22\_29

Unknown\_scan23\_40

Unknown\_scan23\_28

Unknown\_scan23\_41

Unknown\_scan22\_28

Unknown\_scan19\_32

Unknown\_scan23\_37

Unknown\_scan22\_25

Unknown\_scan17\_3

Unknown\_scan22\_31

Unknown\_scan23\_54

Unknown\_scan23\_38

Unknown\_scan23\_52

Unknown\_scan23\_53

Unknown\_scan23\_26

Unknown\_scan23\_27

Unknown\_scan19\_29

Unknown\_scan23\_20

Unknown\_scan23\_50

Unknown\_scan22\_32

Unknown\_scan22\_33

Unknown\_scan22\_27

Unknown\_scan23\_29

Unknown\_scan23\_42

Unknown\_scan23\_18

Unknown\_scan23\_48

Unknown\_scan19\_30

Unknown\_scan23\_24

Unknown\_scan20\_60

Unknown\_scan22\_30

Unknown\_scan20\_51

Unknown\_scan22\_26

Healthy BC Only

Unknown\_scan13\_93

Unknown\_scan13\_11

Unknown\_scan13\_45

19:0 Campesteryl ester

20:0 Cholesteryl ester, 18:0 Sitosteryl ester

Cholesteryl 11-hydroperoxy-eicosatetraenoate, 22:2 Cholesteryl ester, 20:1 Stigmasteryl ester, 20:2 Sitosteryl ester

18:1 Campesteryl ester

lanosteryl palmitoleate, 18:2 Campesteryl ester

20:3 Campesteryl ester

Unknown\_scan15\_43

Unknown\_scan15\_26

Unknown\_scan15\_14

22:6 Cholesteryl ester

20:1 Cholesteryl ester, 18:0 Stigmasteryl ester, 18:1 Sitosteryl ester

Unknown\_scan15\_21

ecdysone palmitate, 22:3 Cholesteryl ester, 20:2 Stigmasteryl ester, 20:3 Sitosteryl ester

Unknown\_scan15\_24

Unknown\_scan15\_57

Unknown\_scan15\_29

22:1 Campesteryl ester

22:0 Sitosteryl ester

Unknown\_scan15\_20

Unknown\_scan15\_36

Unknown\_scan15\_38

18:0 Cholesteryl ester, 16:0 Sitosteryl ester

22:5 Cholesteryl ester

Unknown\_scan15\_61

PC (40:10)

PCo(40:3); PC (39:3)

Unknown\_scan1\_11

PCp(40:6); PC (39:7)

SM (d18:0/24:0)

Unknown\_scan1\_28

PC (40:9); PC (39:2)

Unknown\_scan1\_23

PC (40:4); PCo(41:4)

PCo(40:4); PC (39:4)

PC (36:7)

PCo(38:6)

PCo(40:5); PC (39:5)

Unknown\_scan1\_17

PC (40:8); PC (39:1)

PCo(36:0); PC (35:0)

Unknown\_MRM\_PCandSM\_4

PC (38:0); PCo(39:0)

Unknown\_scan1\_21

Unknown\_scan1\_20

PCo(40:2)

PC (40:3); PCo(41:3)

PC (38:7); PC (37:0); PCp(39:6)

PC (40:2); PCo(41:2)

SM (d18:2/18:1)

PCo(40:6); PC (39:6)

PC (40:7); PCp(41:6)

Unknown\_MRM\_PCandSM\_3

Unknown\_scan1\_4

PC (32:3); PCo(33:3)

Unknown\_scan1\_30

Unknown\_scan1\_7

PCp(42:6); PC (41:7)

PC (34:6)

TAG\_19:0\_16

LPG (20:0)

Unknown\_scan22\_11

Unknown\_scan23\_11

Unknown\_scan25\_26

Unknown\_scan33\_3

Obese BC Only

C22:0

C26:0

TAG(48:1)\_FA 16:0

TAG(50:4)\_FA 16:0

TAG(52:3)\_FA 16:1

PE (36:2)

PE (38:4)

Unknown\_scan23\_16

Unknown\_scan24\_20

Unknown\_scan24\_18

Unknown\_scan29\_4

Unknown\_scan20\_55

Unknown\_scan23\_35

Unknown\_scan20\_53

Unknown\_scan24\_12

Unknown\_scan22\_24

Unknown\_scan24\_21

Unknown\_scan20\_59

Unknown\_scan20\_50

Unknown\_scan28\_5

Unknown\_scan23\_36

Unknown\_scan23\_32

Unknown\_scan23\_30

Comparison of Lipids Associated with PVP 20 nm AuNPs Following Incubation in Healthy or Obese Human Serum

In Common

Unknown\_scan13\_50

Unknown\_scan13\_21

Unknown\_scan13\_49

Arachidyl carnitine, O-[(9Z)-17-carboxyheptadec-9-enoyl]carnitine

Palmitoylcarnitine, (5Z)-13-carboxytridec-5-enoylcarnitine

Unknown\_scan13\_43

Unknown\_scan13\_16

(5Z,8Z)-tetradecadienoylcarnitine

18:2 Cholesteryl ester, zymosteryl oleate, 16:1 Stigmasteryl ester, 16:2 Sitosteryl ester

18:1 Cholesteryl ester, 16:0 Stigmasteryl ester, 16:1 Sitosteryl ester

17:1 Campesteryl ester

Unknown\_scan15\_23

18:3 Cholesteryl ester, 16:2 Stigmasteryl ester, 16:3 Sitosteryl ester

Unknown\_scan15\_22

20:4 Cholesteryl ester, 18:3 Stigmasteryl ester

15:1 Campesteryl ester

16:1 Cholesteryl ester

22:6 Cholesteryl ester

Unknown\_scan15\_25

Unknown\_scan15\_21

20:5 Cholesteryl ester

20:3 Cholesteryl ester, 18:2 Stigmasteryl ester, 18:3 Sitosteryl ester

Unknown\_scan15\_24

16:0 Cholesteryl ester

15:0 Campesteryl ester

Unknown\_scan15\_38

Unknown\_scan12\_11

Cer(d18:1/24:0)

Unknown\_scan12\_12

Unknown\_scan12\_13

Unknown\_scan12\_14

PC (34:2); PCo(35:2)

SM (d18:1/16:0)

PC (34:1); PCo(35:1)

PC (36:2); PCo(37:2)

SM (d18:1/20:0)

PC (30:1)

PC (36:3); PCo(37:3)

PC (36:4); PCo(37:4)

SM (d18:0/20:0)

SM (d16:1/24:0)

PC (36:1); PCo(37:1)

SM (d16:1/24:1)

SM (d18:1/24:1)15Z))

PC (38:4); PCo(39:4)

SM (d18:1/18:0)

PC (38:2); PCo(39:2)

PC (38:3); PCo(39:3)

SM (d18:2/22:1)

SM (d18:1/14:0)

SM (d16:1/18:1)

SM (d18:1/24:0)

SM (d18:0/16:0)

SM (d18:2/24:1)

Unknown\_scan1\_22

PC (32:1); PCo(33:1)

PC (38:1)

PC (36:8)

PC (34:0); PCo(35:0)

SM (d18:1/18:1)9Z))

PC (30:2)

SM (d16:1/22:1)

PC (32:0); PCo(33:0)

PCo(36:1); PC (35:1)

PC (38:8)

PC (38:5); PCo(39:5)

PC (38:6); PCo(39:6)

PC (38:9)

PC (32:2)

PC (30:0)

SM (d18:0/22:0)

PCo(38:2); PC (37:2)

PCo(36:2); PC (35:2)

Unknown\_scan1\_19

SM (d18:0/18:0)

PCo(34:2)

PCo(38:3); PC (37:3)

PCo(34:1); PC (33:1)

PCo(38:1)

PC (36:0); PCp(38:6); PCo(37:0)

Unknown\_scan1\_9

PC (34:3); PCo(35:3)

PCo(36:4)

Unknown\_scan1\_6

Unknown\_MRM\_PCandSM\_2

PCo(38:4); PC (37:4)

Unknown\_scan1\_3

Unknown\_scan1\_25

PCo(32:1)

PCo(34:3)

PCo(36:3); PC (35:3)

Unknown\_scan1\_26

PC (36:5); PCo(37:5)

PC (40:6); PCo(41:6)

PCo(32:0)

PCo(38:5); PC (37:5)

Unknown\_scan1\_15

Unknown\_scan1\_11

PCo(36:5)

Unknown\_scan1\_16

SM (d18:0/24:0)

PC (40:5); PCo(41:5)

Unknown\_scan1\_28

SM (d18:0/14:0)

PC (40:4); PCo(41:4)

PC (36:7)

SM (d18:2/14:0)

PCo(38:6)

PCo(34:0); PC (33:0)

Unknown\_scan1\_24

Unknown\_scan1\_17

PCo(36:0); PC (35:0)

PC (38:0); PCo(39:0)

Unknown\_scan1\_13

Unknown\_scan1\_20

SM (d18:1/12:0)

PC (40:7); PCp(41:6)

PC (34:4)

Unknown\_scan1\_4

Unknown\_scan1\_12

TAG(50:2)\_FA 16:0

TAG(52:2)\_FA 16:0

TAG(52:2)\_FA 18:1

TAG(52:3)\_FA 18:1

TAG(52:3)\_FA 16:0

TAG(54:3)\_FA 18:1

TAG\_15:0\_16

TAG(52:3)\_FA 18:2

TAG(50:3)\_FA 16:0

TAG(52:1)\_FA 18:1

TAG(52:1)\_FA 18:0

TAG(54:4)\_FA 18:1

TAG(50:2)\_FA 18:1

TAG(52:1)\_FA 16:0

TAG(50:3)\_FA 18:1

TAG(52:4)\_FA 18:2

TAG(50:3)\_FA 18:2

TAG(52:4)\_FA 16:0

TAG(54:2)\_FA 18:1

TAG(54:4)\_FA 18:2

TAG(52:2)\_FA 18:0

TAG(54:2)\_FA 18:0

TAG(54:5)\_FA 18:2

TAG(48:1)\_FA 16:0

TAG(50:3)\_FA 16:1

PE (36:2)

PE (38:4)

PS (28:0)

Unknown\_scan23\_12

Unknown\_scan22\_10

Unknown\_scan23\_13

Unknown\_scan19\_34

Unknown\_scan19\_33

Unknown\_scan23\_39

Unknown\_scan22\_29

Unknown\_scan23\_40

Unknown\_scan23\_28

Unknown\_scan23\_41

Unknown\_scan22\_28

Unknown\_scan19\_32

Unknown\_scan23\_37

Unknown\_scan22\_25

Unknown\_scan17\_3

Unknown\_scan22\_31

Unknown\_scan23\_54

Unknown\_scan23\_38

Unknown\_scan23\_52

Unknown\_scan23\_53

Unknown\_scan23\_26

Unknown\_scan23\_27

Unknown\_scan19\_29

Unknown\_scan23\_20

Unknown\_scan23\_50

Unknown\_scan22\_32

Unknown\_scan22\_33

Unknown\_scan22\_27

Unknown\_scan23\_29

Unknown\_scan23\_42

Unknown\_scan23\_18

Unknown\_scan24\_18

Unknown\_scan23\_24

Unknown\_scan20\_55

Unknown\_scan23\_35

Unknown\_scan20\_53

Unknown\_scan20\_60

Unknown\_scan22\_24

Unknown\_scan20\_51

Unknown\_scan20\_59

Unknown\_scan22\_26

Unknown\_scan23\_32

Healthy BC Only

Unknown\_scan13\_93

Unknown\_scan13\_122

19:0 Campesteryl ester

20:0 Cholesteryl ester, 18:0 Sitosteryl ester

Cholesteryl 11-hydroperoxy-eicosatetraenoate, 22:2 Cholesteryl ester, 20:1 Stigmasteryl ester, 20:2 Sitosteryl ester

18:1 Campesteryl ester

lanosteryl palmitoleate, 18:2 Campesteryl ester

20:3 Campesteryl ester

Unknown\_scan15\_43

Unknown\_scan15\_26

Unknown\_scan15\_14

20:1 Cholesteryl ester, 18:0 Stigmasteryl ester, 18:1 Sitosteryl ester

ecdysone palmitate, 22:3 Cholesteryl ester, 20:2 Stigmasteryl ester, 20:3 Sitosteryl ester

Unknown\_scan15\_57

Unknown\_scan15\_29

22:1 Campesteryl ester

Unknown\_scan15\_31

22:1 Cholesteryl ester, 20:0 Stigmasteryl ester, 20:1 Sitosteryl ester

22:0 Sitosteryl ester

Unknown\_scan15\_20

Unknown\_scan15\_36

Unknown\_scan15\_65; Unknown\_scan38\_9

18:0 Cholesteryl ester, 16:0 Sitosteryl ester

17:0 Campesteryl ester

22:5 Cholesteryl ester

Unknown\_scan15\_61

Unknown\_scan15\_45

Unknown\_scan15\_50

Unknown\_scan15\_42

16:3 Stigmasteryl ester

20:0 Campesteryl ester

22:2 Campesteryl ester

Unknown\_scan15\_48

Unknown\_scan15\_40

22:3 Stigmasteryl ester

Unknown\_scan15\_52

lanosteryl oleate, 20:2 Campesteryl ester

Unknown\_scan15\_60

14:0 Cholesteryl ester

19:0 cholesteryl ester, 17:0 sitosteryl ester

Unknown\_scan15\_56

Unknown\_scan15\_35

Unknown\_scan15\_37

Unknown\_scan15\_41

Unknown\_scan15\_30

Unknown\_scan15\_33

22:4 Cholesteryl ester, 20:3 Stigmasteryl ester

Unknown\_scan15\_13

Unknown\_scan15\_49

20:2 Cholesteryl ester, 18:1 Stigmasteryl ester, 18:2 Sitosteryl ester

Cer(d18:1/22:0)

PC (40:10)

PCo(40:3); PC (39:3)

PCp(40:6); PC (39:7)

PC (40:9); PC (39:2)

Unknown\_scan1\_23

PCo(40:4); PC (39:4)

PCo(40:5); PC (39:5)

PC (40:8); PC (39:1)

Unknown\_MRM\_PCandSM\_4

Unknown\_scan1\_21

PCo(40:2)

PC (40:3); PCo(41:3)

PC (38:7); PC (37:0); PCp(39:6)

PC (40:2); PCo(41:2)

SM (d18:2/18:1)

PCo(40:1)

PCo(40:6); PC (39:6)

SM (d18:2/20:1)

Unknown\_MRM\_PCandSM\_3

Unknown\_scan1\_14

Unknown\_MRM\_PCandSM\_1

PCo(38:0)

PC (42:11); PC (41:4)

PCo(32:2)

PC (32:3); PCo(33:3)

Unknown\_scan1\_1

Unknown\_scan1\_27

Unknown\_scan1\_7

Unknown\_scan1\_29

PC (40:1); PCo(41:1)

SM (d18:1/26:1)17Z))

SM (d18:1/26:0)

PC (34:6)

PC (42:9)

LPG (20:0)

PI (20:0)

PS (20:0)

Unknown\_scan22\_11

Unknown\_scan23\_11

Unknown\_scan22\_12

Unknown\_scan22\_13

Unknown\_scan22\_14

Unknown\_scan24\_3

Unknown\_scan23\_10

Unknown\_scan23\_14

Unknown\_scan25\_26

Unknown\_scan33\_3

Unknown\_scan29\_2

Unknown\_scan15\_65, Unknown\_scan38\_9

Unknown\_scan25\_28

Unknown\_scan28\_2

Unknown\_scan33\_4

Unknown\_scan37\_22

Obese BC Only

Unknown\_scan13\_11

Unknown\_scan13\_45

TAG(54:3)\_FA 18:0

C22:0

C26:0

C28:0

TAG(52:2)\_FA 18:2

C24:0

TAG(54:3)\_FA 18:2

TAG(50:4)\_FA 16:0

TAG\_19:0\_16

TAG(52:4)\_FA 16:1

TAG(54:5)\_FA 18:1

TAG(52:4)\_FA 18:1

TAG(48:1)\_FA 18:1

TAG(50:4)\_FA 18:2

TAG(52:3)\_FA 16:1

TAG(50:1)\_FA 18:0

TAG(54:1)\_FA 18:0

PE (36:1)

PE (34:2)

PE (38:6)

Unknown\_scan23\_16

Unknown\_scan24\_20

Unknown\_scan29\_4

Unknown\_scan23\_48

Unknown\_scan19\_30

Unknown\_scan24\_12

Unknown\_scan22\_30

Unknown\_scan23\_46

Unknown\_scan24\_21

Unknown\_scan20\_50

Unknown\_scan28\_5

Unknown\_scan37\_37

Unknown\_scan24\_10

Unknown\_scan23\_36

Unknown\_scan24\_29

Unknown\_scan17\_2

Unknown\_scan23\_30

Unknown\_scan24\_31

Unknown\_scan23\_49

Unknown\_scan56\_7

Unknown\_scan23\_55

Unknown\_scan30\_7

Comparison of Lipids Associated with Citrate 100 nm AuNPs Following Incubation in Healthy or Obese Human Serum

In Common

Unknown\_scan13\_50

Unknown\_scan13\_21

Unknown\_scan13\_49

Arachidyl carnitine, O-[(9Z)-17-carboxyheptadec-9-enoyl]carnitine

Palmitoylcarnitine, (5Z)-13-carboxytridec-5-enoylcarnitine

Unknown\_scan13\_43

Unknown\_scan13\_16

(5Z,8Z)-tetradecadienoylcarnitine

Unknown\_scan13\_93

18:2 Cholesteryl ester, zymosteryl oleate, 16:1 Stigmasteryl ester, 16:2 Sitosteryl ester

18:1 Cholesteryl ester, 16:0 Stigmasteryl ester, 16:1 Sitosteryl ester

17:1 Campesteryl ester

Unknown\_scan15\_23

18:3 Cholesteryl ester, 16:2 Stigmasteryl ester, 16:3 Sitosteryl ester

Unknown\_scan15\_22

20:4 Cholesteryl ester, 18:3 Stigmasteryl ester

15:1 Campesteryl ester

16:1 Cholesteryl ester

22:6 Cholesteryl ester

Unknown\_scan15\_25

Unknown\_scan15\_21

20:5 Cholesteryl ester

20:3 Cholesteryl ester, 18:2 Stigmasteryl ester, 18:3 Sitosteryl ester

Unknown\_scan15\_24

16:0 Cholesteryl ester

15:0 Campesteryl ester

Unknown\_scan15\_38

Cer(d18:1/24:0)

Unknown\_scan12\_12

Unknown\_scan12\_14

PC (34:2); PCo(35:2)

SM (d18:1/16:0)

PC (34:1); PCo(35:1)

PC (36:2); PCo(37:2)

SM (d18:1/20:0)

PC (30:1)

PC (36:3); PCo(37:3)

PC (36:4); PCo(37:4)

SM (d18:0/20:0)

SM (d16:1/24:0)

PC (36:1); PCo(37:1)

SM (d16:1/24:1)

SM (d18:1/24:1)15Z))

PC (38:4); PCo(39:4)

SM (d18:1/18:0)

PC (38:2); PCo(39:2)

PC (38:3); PCo(39:3)

SM (d18:2/22:1)

SM (d18:1/14:0)

SM (d16:1/18:1)

SM (d18:1/24:0)

SM (d18:0/16:0)

SM (d18:2/24:1)

Unknown\_scan1\_22

PC (32:1); PCo(33:1)

PC (38:1)

PC (36:8)

PC (34:0); PCo(35:0)

SM (d18:1/18:1)9Z))

PC (30:2)

SM (d16:1/22:1)

PC (32:0); PCo(33:0)

PCo(36:1); PC (35:1)

PC (38:8)

PC (38:5); PCo(39:5)

PC (38:6); PCo(39:6)

PC (38:9)

PC (32:2)

PC (30:0)

SM (d18:0/22:0)

PCo(38:2); PC (37:2)

PCo(36:2); PC (35:2)

Unknown\_scan1\_19

SM (d18:0/18:0)

PCo(34:2)

PCo(38:3); PC (37:3)

PCo(34:1); PC (33:1)

PCo(38:1)

PC (36:0); PCp(38:6); PCo(37:0)

Unknown\_scan1\_9

PC (34:3); PCo(35:3)

PCo(36:4)

Unknown\_scan1\_6

Unknown\_MRM\_PCandSM\_2

PCo(38:4); PC (37:4)

Unknown\_scan1\_3

Unknown\_scan1\_25

PCo(32:1)

PCo(34:3)

PCo(36:3); PC (35:3)

Unknown\_scan1\_26

PC (36:5); PCo(37:5)

PC (40:6); PCo(41:6)

PCo(32:0)

PCo(38:5); PC (37:5)

Unknown\_scan1\_15

Unknown\_scan1\_11

PCo(36:5)

Unknown\_scan1\_16

SM (d18:0/24:0)

PC (40:5); PCo(41:5)

Unknown\_scan1\_28

SM (d18:0/14:0)

PC (40:4); PCo(41:4)

PC (36:7)

SM (d18:2/14:0)

PCo(38:6)

PCo(34:0); PC (33:0)

Unknown\_scan1\_24

PC (40:8); PC (39:1)

Unknown\_scan1\_13

SM (d18:1/12:0)

PC (40:7); PCp(41:6)

Unknown\_scan1\_4

TAG(50:2)\_FA 16:0

TAG(52:2)\_FA 16:0

TAG(52:2)\_FA 18:1

TAG(52:3)\_FA 18:1

TAG(52:3)\_FA 16:0

TAG(54:3)\_FA 18:1

TAG\_15:0\_16

TAG(52:3)\_FA 18:2

TAG(50:3)\_FA 16:0

TAG(52:1)\_FA 18:1

TAG(52:1)\_FA 18:0

TAG(50:2)\_FA 18:1

TAG(52:1)\_FA 16:0

TAG(50:3)\_FA 18:1

TAG(50:3)\_FA 18:2

TAG(52:4)\_FA 16:0

TAG(54:2)\_FA 18:1

TAG(52:2)\_FA 18:0

TAG(54:2)\_FA 18:0

TAG(54:5)\_FA 18:2

PS (28:0)

Unknown\_scan23\_12

Unknown\_scan22\_10

Unknown\_scan23\_13

Unknown\_scan19\_34

Unknown\_scan19\_33

Unknown\_scan23\_39

Unknown\_scan22\_29

Unknown\_scan23\_40

Unknown\_scan23\_28

Unknown\_scan23\_41

Unknown\_scan22\_28

Unknown\_scan19\_32

Unknown\_scan23\_37

Unknown\_scan22\_25

Unknown\_scan17\_3

Unknown\_scan22\_31

Unknown\_scan23\_54

Unknown\_scan23\_38

Unknown\_scan23\_52

Unknown\_scan23\_53

Unknown\_scan23\_26

Unknown\_scan23\_27

Unknown\_scan19\_29

Unknown\_scan23\_20

Unknown\_scan22\_32

Unknown\_scan22\_33

Unknown\_scan22\_27

Unknown\_scan23\_29

Unknown\_scan23\_42

Unknown\_scan23\_18

Unknown\_scan20\_55

Unknown\_scan20\_53

Unknown\_scan20\_60

Healthy BC Only

2-Hydroxylauroylcarnitine, 3-hydroxydodecanoylcarnitine

Unknown\_scan13\_122

Unknown\_scan13\_15

19:0 Campesteryl ester

20:0 Cholesteryl ester, 18:0 Sitosteryl ester

Cholesteryl 11-hydroperoxy-eicosatetraenoate, 22:2 Cholesteryl ester, 20:1 Stigmasteryl ester, 20:2 Sitosteryl ester

18:1 Campesteryl ester

lanosteryl palmitoleate, 18:2 Campesteryl ester

20:3 Campesteryl ester

Unknown\_scan15\_43

Unknown\_scan15\_26

Unknown\_scan15\_14

20:1 Cholesteryl ester, 18:0 Stigmasteryl ester, 18:1 Sitosteryl ester

ecdysone palmitate, 22:3 Cholesteryl ester, 20:2 Stigmasteryl ester, 20:3 Sitosteryl ester

Unknown\_scan15\_57

Unknown\_scan15\_29

22:1 Campesteryl ester

Unknown\_scan15\_31

22:1 Cholesteryl ester, 20:0 Stigmasteryl ester, 20:1 Sitosteryl ester

22:0 Sitosteryl ester

Unknown\_scan15\_20

Unknown\_scan15\_36

Unknown\_scan15\_65; Unknown\_scan38\_9

18:0 Cholesteryl ester, 16:0 Sitosteryl ester

17:0 Campesteryl ester

22:5 Cholesteryl ester

Unknown\_scan15\_61

Unknown\_scan15\_50

Unknown\_scan15\_42

16:3 Stigmasteryl ester

Unknown\_scan15\_48

Unknown\_scan15\_52

Unknown\_scan15\_60

PC (40:10)

PCo(40:3); PC (39:3)

PCp(40:6); PC (39:7)

PC (40:9); PC (39:2)

Unknown\_scan1\_23

PCo(40:4); PC (39:4)

PCo(40:5); PC (39:5)

Unknown\_scan1\_17

PCo(36:0); PC (35:0)

Unknown\_MRM\_PCandSM\_4

PC (38:0); PCo(39:0)

Unknown\_scan1\_21

Unknown\_scan1\_20

PCo(40:2)

PC (40:3); PCo(41:3)

PC (38:7); PC (37:0); PCp(39:6)

PC (40:2); PCo(41:2)

SM (d18:2/18:1)

PCo(40:1)

PCo(40:6); PC (39:6)

SM (d18:2/20:1)

Unknown\_MRM\_PCandSM\_3

PC (34:4)

PC (32:3); PCo(33:3)

Unknown\_scan1\_7

PCp(42:6); PC (41:7)

PCo(40:0); PC (39:0)

PC (34:6)

LPG (20:0)

PI (20:0)

Unknown\_scan22\_11

Unknown\_scan23\_11

Unknown\_scan22\_12

Unknown\_scan22\_13

Unknown\_scan25\_26

Unknown\_scan33\_3

Unknown\_scan29\_2

Unknown\_scan15\_65, Unknown\_scan38\_9

Obese BC Only

Unknown\_scan13\_45

TAG(54:4)\_FA 18:1

TAG(52:4)\_FA 18:2

TAG(54:4)\_FA 18:2

TAG(54:3)\_FA 18:0

C26:0

TAG(52:2)\_FA 18:2

TAG(50:3)\_FA 16:1

TAG(50:4)\_FA 16:0

PE (36:2)

PE (38:4)

PE (36:4)

Unknown\_scan23\_16

Unknown\_scan23\_50

Unknown\_scan24\_20

Unknown\_scan24\_18

Unknown\_scan29\_4

Unknown\_scan23\_48

Unknown\_scan19\_30

Unknown\_scan23\_24

Unknown\_scan23\_35

Unknown\_scan24\_12

Unknown\_scan22\_24

Unknown\_scan22\_30

Unknown\_scan24\_21

Unknown\_scan20\_59

Unknown\_scan20\_50

Unknown\_scan28\_5

Unknown\_scan23\_36

Unknown\_scan24\_31

Comparison of Lipids Associated with Citrate 20 nm AuNPs Following Incubation in Healthy or Obese Human Serum

In Common

Unknown\_scan13\_50

Unknown\_scan13\_21

Unknown\_scan13\_49

Arachidyl carnitine, O-[(9Z)-17-carboxyheptadec-9-enoyl]carnitine

Palmitoylcarnitine, (5Z)-13-carboxytridec-5-enoylcarnitine

Unknown\_scan13\_43

Unknown\_scan13\_16

(5Z,8Z)-tetradecadienoylcarnitine

Unknown\_scan13\_93

18:2 Cholesteryl ester, zymosteryl oleate, 16:1 Stigmasteryl ester, 16:2 Sitosteryl ester

18:1 Cholesteryl ester, 16:0 Stigmasteryl ester, 16:1 Sitosteryl ester

17:1 Campesteryl ester

Unknown\_scan15\_23

18:3 Cholesteryl ester, 16:2 Stigmasteryl ester, 16:3 Sitosteryl ester

Unknown\_scan15\_22

20:4 Cholesteryl ester, 18:3 Stigmasteryl ester

15:1 Campesteryl ester

16:1 Cholesteryl ester

22:6 Cholesteryl ester

Unknown\_scan15\_25

20:5 Cholesteryl ester

20:3 Cholesteryl ester, 18:2 Stigmasteryl ester, 18:3 Sitosteryl ester

Unknown\_scan15\_24

16:0 Cholesteryl ester

15:0 Campesteryl ester

Unknown\_scan12\_12

Unknown\_scan12\_14

PC (34:2); PCo(35:2)

SM (d18:1/16:0)

PC (34:1); PCo(35:1)

PC (36:2); PCo(37:2)

SM (d18:1/20:0)

PC (30:1)

PC (36:3); PCo(37:3)

PC (36:4); PCo(37:4)

SM (d18:0/20:0)

SM (d16:1/24:0)

PC (36:1); PCo(37:1)

SM (d16:1/24:1)

SM (d18:1/24:1)15Z))

PC (38:4); PCo(39:4)

SM (d18:1/18:0)

PC (38:2); PCo(39:2)

PC (38:3); PCo(39:3)

SM (d18:2/22:1)

SM (d18:1/14:0)

SM (d16:1/18:1)

SM (d18:1/24:0)

SM (d18:0/16:0)

SM (d18:2/24:1)

Unknown\_scan1\_22

PC (32:1); PCo(33:1)

PC (38:1)

PC (36:8)

PC (34:0); PCo(35:0)

SM (d18:1/18:1)9Z))

PC (30:2)

SM (d16:1/22:1)

PC (32:0); PCo(33:0)

PCo(36:1); PC (35:1)

PC (38:8)

PC (38:5); PCo(39:5)

PC (38:6); PCo(39:6)

PC (38:9)

PC (32:2)

PC (30:0)

SM (d18:0/22:0)

PCo(38:2); PC (37:2)

PCo(36:2); PC (35:2)

Unknown\_scan1\_19

SM (d18:0/18:0)

PCo(34:2)

PCo(38:3); PC (37:3)

PCo(34:1); PC (33:1)

PCo(38:1)

PC (36:0); PCp(38:6); PCo(37:0)

Unknown\_scan1\_9

PC (34:3); PCo(35:3)

PCo(36:4)

Unknown\_scan1\_6

Unknown\_MRM\_PCandSM\_2

PCo(38:4); PC (37:4)

Unknown\_scan1\_3

Unknown\_scan1\_25

PCo(32:1)

PCo(34:3)

PCo(36:3); PC (35:3)

Unknown\_scan1\_26

PC (36:5); PCo(37:5)

PC (40:6); PCo(41:6)

PCo(32:0)

PCo(38:5); PC (37:5)

Unknown\_scan1\_15

Unknown\_scan1\_11

PCo(36:5)

Unknown\_scan1\_16

SM (d18:0/24:0)

PC (40:5); PCo(41:5)

Unknown\_scan1\_28

SM (d18:0/14:0)

PC (40:4); PCo(41:4)

SM (d18:2/14:0)

PCo(38:6)

PCo(34:0); PC (33:0)

Unknown\_scan1\_24

Unknown\_scan1\_13

SM (d18:1/12:0)

Unknown\_scan1\_4

TAG(50:2)\_FA 16:0

TAG(52:2)\_FA 16:0

TAG(52:2)\_FA 18:1

TAG(52:3)\_FA 18:1

TAG(52:3)\_FA 16:0

TAG(54:3)\_FA 18:1

TAG\_15:0\_16

TAG(52:3)\_FA 18:2

TAG(50:3)\_FA 16:0

TAG(52:1)\_FA 18:1

TAG(54:4)\_FA 18:1

TAG(50:2)\_FA 18:1

TAG(50:3)\_FA 18:1

TAG(52:4)\_FA 18:2

TAG(52:4)\_FA 16:0

TAG(54:2)\_FA 18:1

TAG(52:2)\_FA 18:0

TAG(54:3)\_FA 18:0

TAG(54:2)\_FA 18:0

PE (36:2)

PE (38:4)

PS (28:0)

Unknown\_scan23\_12

Unknown\_scan22\_10

Unknown\_scan19\_34

Unknown\_scan19\_33

Unknown\_scan23\_39

Unknown\_scan22\_29

Unknown\_scan23\_40

Unknown\_scan23\_28

Unknown\_scan23\_41

Unknown\_scan22\_28

Unknown\_scan19\_32

Unknown\_scan23\_37

Unknown\_scan22\_25

Unknown\_scan17\_3

Unknown\_scan22\_31

Unknown\_scan23\_54

Unknown\_scan23\_38

Unknown\_scan23\_52

Unknown\_scan23\_53

Unknown\_scan23\_26

Unknown\_scan23\_27

Unknown\_scan19\_29

Unknown\_scan23\_20

Unknown\_scan23\_50

Unknown\_scan22\_32

Unknown\_scan22\_33

Unknown\_scan22\_27

Unknown\_scan23\_29

Unknown\_scan23\_42

Unknown\_scan23\_18

Unknown\_scan24\_18

Unknown\_scan29\_4

Unknown\_scan23\_48

Unknown\_scan23\_24

Unknown\_scan20\_55

Unknown\_scan22\_24

Unknown\_scan22\_26

Healthy BC Only

2-Hydroxylauroylcarnitine, 3-hydroxydodecanoylcarnitine

Unknown\_scan13\_122

19:0 Campesteryl ester

20:0 Cholesteryl ester, 18:0 Sitosteryl ester

Cholesteryl 11-hydroperoxy-eicosatetraenoate, 22:2 Cholesteryl ester, 20:1 Stigmasteryl ester, 20:2 Sitosteryl ester

18:1 Campesteryl ester

lanosteryl palmitoleate, 18:2 Campesteryl ester

20:3 Campesteryl ester

Unknown\_scan15\_43

Unknown\_scan15\_26

Unknown\_scan15\_14

20:1 Cholesteryl ester, 18:0 Stigmasteryl ester, 18:1 Sitosteryl ester

Unknown\_scan15\_21

ecdysone palmitate, 22:3 Cholesteryl ester, 20:2 Stigmasteryl ester, 20:3 Sitosteryl ester

Unknown\_scan15\_57

Unknown\_scan15\_29

22:1 Campesteryl ester

Unknown\_scan15\_31

22:1 Cholesteryl ester, 20:0 Stigmasteryl ester, 20:1 Sitosteryl ester

22:0 Sitosteryl ester

Unknown\_scan15\_20

Unknown\_scan15\_36

Unknown\_scan15\_38

Unknown\_scan15\_65; Unknown\_scan38\_9

18:0 Cholesteryl ester, 16:0 Sitosteryl ester

17:0 Campesteryl ester

22:5 Cholesteryl ester

Unknown\_scan15\_61

Unknown\_scan15\_45

Unknown\_scan15\_50

Unknown\_scan15\_42

16:3 Stigmasteryl ester

20:0 Campesteryl ester

22:2 Campesteryl ester

Unknown\_scan15\_48

22:3 Stigmasteryl ester

Unknown\_scan15\_60

Unknown\_scan15\_56

Unknown\_scan15\_37

Unknown\_scan15\_30

Cer(d18:1/24:0)

Cer(d18:1/22:0)

PC (40:10)

PCo(40:3); PC (39:3)

PCp(40:6); PC (39:7)

PC (40:9); PC (39:2)

Unknown\_scan1\_23

PCo(40:4); PC (39:4)

PC (36:7)

PCo(40:5); PC (39:5)

Unknown\_scan1\_17

PC (40:8); PC (39:1)

PCo(36:0); PC (35:0)

Unknown\_MRM\_PCandSM\_4

PC (38:0); PCo(39:0)

Unknown\_scan1\_21

Unknown\_scan1\_20

PCo(40:2)

PC (40:3); PCo(41:3)

PC (38:7); PC (37:0); PCp(39:6)

PC (40:2); PCo(41:2)

SM (d18:2/18:1)

PCo(40:1)

PCo(40:6); PC (39:6)

SM (d18:2/20:1)

PC (40:7); PCp(41:6)

Unknown\_MRM\_PCandSM\_3

PC (34:4)

Unknown\_scan1\_14

Unknown\_MRM\_PCandSM\_1

Unknown\_scan1\_12

PCo(38:0)

PC (42:11); PC (41:4)

PCo(32:2)

PC (32:3); PCo(33:3)

Unknown\_scan1\_1

Unknown\_scan1\_27

Unknown\_scan1\_30

Unknown\_scan1\_7

PC (42:10); PC (41:3)

PCo(40:0); PC (39:0)

PC (34:6)

TAG(52:1)\_FA 16:0

TAG(50:3)\_FA 18:2

TAG(54:5)\_FA 18:2

TAG(54:3)\_FA 18:2

TAG(50:3)\_FA 16:1

LPG (20:0)

PE (18:0)

PI (20:0)

Unknown\_scan23\_13

Unknown\_scan22\_11

Unknown\_scan23\_11

Unknown\_scan22\_12

Unknown\_scan22\_13

Unknown\_scan22\_14

Unknown\_scan23\_10

Unknown\_scan25\_26

Unknown\_scan33\_3

Unknown\_scan29\_2

Unknown\_scan15\_65, Unknown\_scan38\_9

Unknown\_scan33\_4

Unknown\_scan30\_2

Unknown\_scan19\_30

Unknown\_scan20\_60

Obese BC Only

Unknown\_scan13\_15

TAG(52:1)\_FA 18:0

TAG(54:4)\_FA 18:2

C22:0

Unknown\_scan24\_20

Unknown\_scan23\_35

Unknown\_scan20\_53

Unknown\_scan24\_12

Unknown\_scan22\_30

Unknown\_scan20\_50

Unknown\_scan28\_5