## Appendices

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MD (Res)

## Appendix 1: Using Microsoft Access 2010 to create new tables and forms within an existing database.

You first need to create a table in order to turn it into a form and thus a user-friendly database that is easy to read and query.

## 1. Creating a table:

- Click the "Create" tab at the top of the screen.
- Click "table design"
- In the first "field name" box write in your identifying piece of data (e.g. PM number)
- In "data type" scroll down to text and double click.

Note 1: the "data type" box creates areas in your form (see later). For all numerical values and letters where you DO NOT need to do any calculations, click text. For numbers that require calculations click "number". For text boxes that allow more than 255 characters, click "memo".

Note 2: The description box allows you to write notes for future users of the system.

- Continue to add your required fields and data types for the information you would like to store.
- Save the table by clicking the "file" tab, then "save object as" and save as a "table" with your designed title.
- You can then use the " X " sign highlighted by a yellow background at the upper right corner of the screen (below the big X close sign) to close that window within access.


## 2. Creating a form from your table:

- The easiest way to do this is to click the "create" tab and then "form". This should ask you which table you want to make a form out of. Click on the title of the table you have just saved.
- A form will automatically appear in the access window with your initial fields added into it.
- Save this in the same way as the table, however save as a FORM not a table.


## 3. Adding a form to your database:

- If you have a tabbed database, click onto the main page. Click the "HOME" tab at the top of the page.
- Click "View" at the top left of the ribbon bar and then click "design view".
- Click onto the top of one of your tabs within the main database.
- Under "form design tools" there is a tab for "design" - click this.
- A selection of symbols will appear. If you hover over them their functions appears in a text box.
- Click the one called "insert page" with the symbol of a tabbed file with a star on the tab.
- A new tab should appear in your database.
- You can then use the "tab order" button (on the left hand side of the ribbon) to change the order of your tabs as necessary.
- Save the database by clicking the save symbol at the top of the page (above file).
- To add the form you have created to this new tab, under "form design tools" and "design" there is a symbol called "Subform/Subreport" (looks like a newspaper). Click this and a box will appear asking which table or form you want to add into the database.
- Click on the FORM version of the file you created. It should then appear in your database.
- Save the whole database again as described above.
- Save the database by also going to the "home" tab and clicking "save" - this is under the subheading of "records" in the ribbon at the top of the page.


## Appendix 2: How to input data into new tabs: Antenatal; Delivery details, placental details; consent details and classification of cause of loss

Antenatal details:

- PM number: Add in current PM number
- Folic Acid Supplement taken: This is a drop down box - click yes, no or not given. Not given is used when there is no documentation as to whether folic acid was taken or not.
- Maternal Height: Enter this in metres e.g. 1.70
- Maternal weight: Enter in Kilograms
- Maternal BMI: You can calculate it manually in the following way; weight / height ${ }^{2}$
- The weight MUST be in Kg and the height MUST be in metres.
- $\mathrm{BMI}<18.5=$ underweight
- BMI 18.5-24.9 = healthy range
- BMI >25: overweight
- $\quad \mathrm{BMI}>30:$ obese $^{(1)}$
- Anaemia: Drop down box. Click, Yes, No or not given. Not given is used when no information is not supplied.
- Rhesus D status: Drop down box. Click positive, negative or not given. Not given is used when the information is not supplied.
- If Rhesus Negative, was anti $\mathbf{D}$ given: Only complete this section is mother rhesus negative. Drop down box-click yes, no or not given. Not given is used when no information is supplied.
- Sickle Cell: Drop down box. Click yes, no, not given. Not given is used when no information is supplied.
- Thalasaemia: Drop down box. Click yes, no, not given. Not given is used when no information is supplied.
- Rubella Antibody: Drop down box. Click yes for mother is immune, no for not immune or not given Not given is used when no information is supplied.
- Proteinuria: drop down box. Click yes, no, not given. Not given is used when no information is supplied.
- Significant proteinuria is defined as more than 300 mg of protein in a 24 -hour urine collection or more than $30 \mathrm{mg} / \mathrm{mmol}$ in a spot urinary protein: creatinine sample. ${ }^{(2)}$
- Evidence of infection: Drop down box. Click no, urinary infection, vaginal infection, other.
- Details of any infection in this pregnancy: This is a large memo box.
- A positive urinary dipstick test is defined as:
- More than a trace of blood
- More than a trace of protein
- Any positive result for nitrite
- Any positive result for leucocyte esterase ${ }^{(3)}$
- If there is a/many positive high vaginal swab(s) give details of organisms isolated e.g. group B strep etc.
- Provide details of any other infections- acute/chronic, local/systemic.
- Provide details of treatment given if information available.
- Maternal blood pressure: Drop down box- click within normal limits or hypertension.
- Gestational Hypertension is defined as new hypertension presenting after 20 weeks without significant proteinuria;
- Mild: $140 / 90$ to $149 / 99 \mathrm{mmHg}$
- Moderate: $150 / 100$ to $159 / 1090 \mathrm{mmHg}$
- Severe: $160 / 110 \mathrm{mmHg}^{(2)}$
- If the mother has chronic hypertension state as hypertension. Chronic hypertension is described as: hypertension that is present at the booking visit before 20 weeks or if the woman is already taking antihypertensive medication when referred to maternity services. It can be primary or secondary in aetiology. ${ }^{(2)}$
- If hypertension give details: This is a memo box for you to write free text providing details of blood pressure readings/ medication used. Discuss any complications developed e.g. pre-eclampsia etc.
- Pre-eclampsia is defined as "new hypertension presenting after 20 weeks gestation with significant proteinuria" (2)
- Severe pre-eclampsia is defined as "pre-eclampsia with severe hypertension and /or with symptoms and/ or biochemical and/ or haematological impairment." (2)
- Downs Syndrome Screening: Drop down box. Click yes, no or not given. Not given is used when no information is supplied.
- If Yes provide details: Enter the Down 's syndrome screening adjusted risk ratio if provided in the notes and details of any chorionic villous sampling (CVS) or amniocentesis that has been undertaken.
- Dating foetal ultrasound scan: Drop down box. Click either, normal, anomaly, IUGR (intrauterine growth restriction) or intrauterine death. These details should be written on the foetal ultrasound scan reports.
- IUGR is defined as $<10^{\text {th }}$ centile of reference curve. ${ }^{(3)}$
- USS Doppler of uterine artery (dating): This doppler scan may be done at the dating scan and if it was will be recorded with the other details of the scan. Drop down box - click normal, abnormal, not done or not stated.
- If Abnormal (UA (- this is uterine artery)) resistance index? : State the PI and Vmax values.
- USS Doppler of umbilical artery (dating): Drop down box. Click normal, abnormal, not done or not stated.
- If abnormal (UmA (-umbilical artery)) resistance index? : State the PI and Vmax values.
- Gestation of dating scan and details of any anomalies: This is a large memo box for free text.
- The anomaly foetal ultrasound scan boxes and their equivalent Doppler USS boxes are to be completed in the same format as above.
- Mother known to have Diabetes Mellitus prior to pregnancy: Drop down box. Click yes, no or not given. Not given is used when no information is supplied.
- If yes, was insulin routinely taken: Drop down box. Click yes, no or not given. Not given is used when no information is supplied.
- Gestational diabetes: Drop down box. Click yes, no or not given. Not given is used when no information is supplied.
- Gestational diabetes is defined as "carbohydrate intolerance resulting in hyperglycaemia of variable severity with onset or first recognition during pregnancy and with return to normal after birth" ${ }^{(3)}$
- Other current obstetric history: this is a large memo box for free text for any information you feel is relevant to this pregnancy that has not already been recorded elsewhere. This includes any medication the mother is talking during pregnancy and also details leading up to the intrauterine or intrapartum death. Information about the mothers past medical history is also to be included in this memo box, for example if the mother has fibroids.


## Delivery details:

- PM number: enter current PM number
- Gestation at delivery: Give as weeks plus days e.g. $32+4$ means 32 weeks and 4 days.
- Tick the correct box for what type of delivery it is. Two boxes can be ticked e.g. if the delivery was induced and vaginal, tick both of these boxes.
- If the delivery was a caesarean delivery tick caesarean and then tick whether it was a planned or emergency caesarean section and provide details in the memo box labelled "if caesarean, provide details". Details should include why the caesarean was carried out e.g. breech presentation.
- Cord pH: This value will be written in the delivery notes if present. Do not enter anything in this box if no cord pH is found in the notes.
- Intrapartum events: Drop down box for intrapartum complications Click either none, cord prolapse, shoulder dystocia, antepartum haemorrhage, twin complications, fetal distress or other. If more than one complication was encountered or one that is not in the drop down list, click other and then enter all the events into the free text box below labelled "if other, provide details.
- Intrapartum fetal death: Intrapartum foetal death is a death that occurs during delivery. Drop down box. Click yes or no.
- If yes, provide details: This is a large memo box for you to add in the details of the intrapartum death. Include the history of events in labour leading to death.
- Foetal maceration: Drop down box. Click mild, moderate, severe or other description. Provide description details in the memo box "if other, provide details".


## Placental Details:

- PM number: enter current PM number
- Placental weight: This should be the TRIMMED placental weight and recorded in grams.
- Tick a box to state if this was a single placenta or multiple placentas. If multiple provide details in the box below called "if multiple, provide details". Enter details about if this was a twin or triplet placenta
- Cord length: measured in centimetres
- Coiling index: This is the ratio of coils in the cord per 10 cm of cord.
- Number of vessels in cord: Drop down box. Click, 2,3,4 or other. If other - give details in box below labelled "vessels - if other, details".
- Cord insertion: Drop down box. Click central, eccentric, marginal, membranous, vellomentous, fucarta or other.
- The next set of boxes are all drop down boxes or further detail memo boxes. For the cord, membranes and placenta add in correct details for the macroscopic and microscopic descriptions. If there is more than one abnormality in the same category e.g. there is funisitis and angititis of the cord, click other in the drop down box and write the abnormalities in the free text box for "cord other".


## Consent

- PM Number: add in current PM number
- Hospital completing PM: drop down box. Click either, Great Ormond Street or St Georges.
- Tick a box for either complete PM, limited PM or external examination only. If limited state in the "if yes" free text box what the PM was limited to e.g. chest or thorax etc.
- Further examination of organs: Drop down box. Click yes or no.
- Organs examined further - list the organs that parents have stated they consent to be examined further.
- Disposal: Drop down box. Click the description that is ticked on the consent form.
- Tick the relevant boxes indicating "yes" if the parents consented to genetic testing, training and research to be completed on the foetal tissue. If the answer was no to any of these, leave the boxes un-ticked

Classification of cause of loss and risk factors:

- Cause of loss: This is a drop down box. Click the option which classifies the cause of death. The options include:
- Unexplained
- Congenital anomalies
- Infection (any infection except ascending vaginal infection)
- Ascending infection
- Abruption
- Pre-eclampsia
- Known IUGR (intrauterine growth restriction)
- Known cord accident (e.g. cord prolapse)
- Metabolic
- Other
- Risk Factors: These factors are tick boxes - if the mother has one or more of these risk factors, tick the appropriate boxes - leave blank for no. The risk factors include:
- Obesity
- GDM (gestational diabetes mellitus)
- IDDM (insulin dependent diabetes mellitus)
- Post term (i.e. delivery after 40/40 gestation)
- IUG SGA detected at PM ( Intrauterine growth small for gestational age detected at post-mortem)
- Previous SB (previous fetal loss either miscarriage or stillbirth)
- Abnormalities detected at PM (post-mortem): Drop down box. Click none, placental abnormalities, cord abnormalities or organ abnormalities.
- Cause of death:
- Pathologists opinion: Write in this memo box the pathologists opinion on the cause of death
- "Does this opinion match our classification?" Tick this box if the pathologist's opinion matching our classification system.
- Review opinion - final cause of death: This is a memo box that should be left blank whilst completing data entry and reviewed when all data has been inputted.

Note 3: 1(a) cause of death on the Diagnosis tab should be classified in the following manner and should be also added into the cause of death memo box and the final other cause of death box at the bottom of the form in the diagnosis tab.

| Type of stillbirth | 1(a) cause of death to be entered |
| :--- | :--- |
| Antepartum stillbirth with products retained <br> <24 hours in utero | Stillbirth1 |
| Antepartum stillbirth with products retained <br> $>24$ hours in utero | Stillbirth2 |
| Intrapartum detected stillbirth (Known) | Stillbirth3 |
| Intrapartum undetected "fresh" stillbirth | Stillbirth4 |

## References:

(1) http://www.nhs.uk/Livewell/loseweight/Pages/BodyMassIndex.aspx

## Accessed 20.11.14

(2) Royal College of Obstetricians and Gynaecologists. Hypertension in Pregnancy: the management of hypertensive disorders during pregnancy. August 2010. NICE Clinical Guidance. Available online at: http://www.nice.org.uk/nicemedia/live/13098/50475/50475.pdf

Accessed: 27.08.13
(3) National Collaborating Centre for Women's and Children's Health. Antenatal Care routine care for the healthy pregnant woman. March 2008. Available online at:
http://www.nice.org.uk/nicemedia/live/11947/40145/40145.pdf Accessed: 27.08.13

## Appendix 3: Statistical Tests

## Chapter 3: Population Demographics

Chi-square

| Chi-square, df | $0.004082,1$ |
| :--- | ---: |
| z | 0.06389 |
| P value | 0.9491 |

$P$ value summary ns
One- or two-tailed Two-tailed

Statistically significant? (alpha<0.05) No

| Data analyzed | Miscarriage | Stillbirth | Total |
| :--- | ---: | ---: | ---: |
| Spring/Summer | 228 | 341 | 569 |
| Autumn/Winter | 195 | 294 | 489 |
| Total | 423 | 635 | 1058 |

Chi-square

| Chi-square, df | $0.3138,1$ |  |  |
| :--- | ---: | ---: | ---: |
| z | 0.5602 |  |  |
| P value | 0.5753 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Miscarriage | Stillbirth | Total |
| Spring | 99 | 140 | 239 |


| Summer | 129 | 201 | 330 |
| :--- | ---: | ---: | ---: |
| Total | 228 | 341 | 569 |
|  |  |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $0.06642,1$ |  |  |
| z | 0.2577 |  |  |
| P value | 0.7966 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Miscarriage | Stillbirth | Total |
| Summer | 129 | 201 | 330 |
| Winter | 92 | 137 | 229 |
| Total | 221 | 338 | 559 |
|  |  |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $1.381 e-007,1$ |  |  |
| z | 0.0003716 |  |  |
| P value | 0.9997 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Stillbirth Miscarriage | Total |  |
| Male | 348 | 221 | 569 |
| Female | 285 | 181 | 466 |
| Total | 633 | 402 | 1035 |


| Table Analyzed | Data 41 |  |  |
| :--- | ---: | ---: | ---: |
| Chi-square |  |  |  |
| Chi-square, df | $0.1452,1$ |  |  |
| z | 0.3811 |  |  |
| P value | 0.7031 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Miscarriage | Stillbirth | Total |
| Observed male | 221 | 348 | 569 |
| Expected male | 213 | 320 | 533 |
| Total | 434 | 668 | 1102 |
|  |  |  |  |
|  |  |  |  |
| Table Analyzed | Data 42 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $0.1309,1$ |  |  |
| z | 0.3618 |  |  |
| P value | 0.7175 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Miscarriages | Stillbirth | Total |
| Observed females | 181 | 285 | 466 |
| Expected females | 213 | 320 | 533 |
| Total | 394 | 605 | 999 |


| Column B |  |
| :---: | :---: |
| vs. |  |
| Column A |  |
| Mann Whitney test |  |
| P value |  |
| Exact or approximate P value? |  |
| $P$ value summary |  |
| Significantly different? ( $\mathrm{P}<0.05$ ) |  |
| One- or two-tailed P value? |  |
| Sum of ranks in column A,B |  |
| Mann-Whitney U |  |
| Difference between medians |  |
| Median of column A |  |
| Median of column B |  |
| Difference: Actual |  |
| Difference: Hodges-Lehmann |  |
| Column B | Our population |
| vs. | vs. |
| Column A | National Data |
| Mann Whitney test |  |
| P value | 0.0012 |
| Exact or approximate P value? | Exact |
| $P$ value summary | ** |
| Significantly different? ( $\mathrm{P}<0.05$ ) | Yes |
| One- or two-tailed P value? | Two-tailed |
| Sum of ranks in column A,B | 120, 51 |


| Mann-Whitney U | 6 |
| :--- | ---: |
| Difference between medians | $30650, \mathrm{n}=9$ |
| Median of column A | $80.00, \mathrm{n}=9$ |
| Median of column B | -30570 |
| Difference: Actual | -30570 |


| Column B | Our population stillbirths |
| :--- | ---: |
| vs. |  |
| vs. |  |
| Column A | National data stillbirths |
| Mann Whitney test | 0.1606 |
| P value | Exact |
| Exact or approximate P value? | ns |
| P value summary | No |
| Significantly different? (P < 0.05) | Two-tailed |
| One- or two-tailed P value? | 102,69 |
| Sum of ranks in column A,B | 24 |
| Mann-Whitney U |  |
| Difference between medians | $183.0, \mathrm{n}=9$ |
| Median of column A | $40.00, \mathrm{n}=9$ |
| Median of column B | -143.0 |
| Difference: Actual | -147.0 |

Table Analyzed

## Column B

vs.
Column A
Mann Whitney test
P value
Exact or approximate P value?
$P$ value summary
Significantly different? $(\mathrm{P}<0.05)$
One- or two-tailed P value?
Sum of ranks in column A,B
Mann-Whitney U
Difference between medians
Median of column A
Median of column B
Difference: Actual
Difference: Hodges-Lehmann

Mat age nat vs stil Our Stillbirth maternal age vs.
National data maternal age
0.0003

Exact
***
Yes
Two-tailed 123, 48

3
30650, n=9
40.00, n=9
-30610
-30610

| Column B | Our population - miscarriage |
| :--- | ---: |
| vs. | vs. |
| Column A | National data - miscarriage |
| Mann Whitney test | 0.0008 |
| P value | Exact |
| Exact or approximate P value? | $* * *$ |
| P value summary | Yes |
| Significantly different? (P < 0.05) | Two-tailed |
| One- or two-tailed P value? | 121,50 |
| Sum of ranks in column A,B | 5 |
| Mann-Whitney U |  |
| Difference between medians | $3845, \mathrm{n}=9$ |
| Median of column A | $40.00, \mathrm{n}=9$ |
| Median of column B | -3805 |
| Difference: Actual | -3805 |

Table Analyzed
Column B
vs.
Column A
Mann Whitney test
P value
Exact or approximate P value?
$P$ value summary
Significantly different? $(\mathrm{P}<0.05)$
One- or two-tailed P value?
Sum of ranks in column A,B
Mann-Whitney U
Difference between medians
Median of column A
Median of column B
Difference: Actual
Difference: Hodges-Lehmann

Mat age nat vs mis
Miscarriages
vs.
National data
$<0.0001$
Exact
****
Yes
Two-tailed 125, 46

1

30650, n=9
40.00, n=9
-30610
-30610

Chi-square
Chi-square, df
Z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
White
Non-white
Total

Chi-square
Chi-square
Chi-square, df
Z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analysed
Black- black british African
All other ethnicity
Total

Chi-square
Chi-square, df Z
17.15, 1
4.141
$<0.0001$
****
Two-tailed
Yes
No. of stillbirths
311
144
455
455

No. of miscarriages
158
138
296

Total
469
282
751


Chi-square
Chi-square, df
Z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
Black
Not black
Total
787.4, 1
28.06
$<0.0001$
****
Two-tailed
Yes
National data all births Our total population
Total
33105
626974
660079

206

| Column B |  |
| :--- | ---: |
| vs. | No. of stillbirths <br> vs. |
| Column A | No of miscarriages |
| Unpaired t test |  |
| P value | 0.3793 |
| P value summary | Ns |
| Significantly different? (P < 0.05) | No |
| One- or two-tailed P value? | Two-tailed |
| t , df | $\mathrm{t}=0.8823 \mathrm{df}=127$ |
| How big is the difference? |  |
| Mean $\pm$ SEM of column A | $3.169 \pm 0.6227, \mathrm{n}=65$ |
| Mean $\pm$ SEM of column B | $4.047 \pm 0.7777, \mathrm{n}=64$ |
| Difference between means | $0.8776 \pm 0.9947$ |
| 95\% confidence interval | -1.091 to 2.846 |
| R squared | 0.006093 |
| F test to compare variances |  |
| F,DFn, Dfd | $1.536,63,64$ |
| P value | 0.0895 |
| P value summary | Ns |
| Significantly different? $(\mathrm{P}<0.05)$ | No |

Chi-square
Chi-square, df
0.5787, 1
0.7607

Z
0.4468
$P$ value summary
ns
One- or two-tailed
Two-tailed

| Statistically significant? (alpha<0.05) | No |  |  |
| :--- | ---: | ---: | ---: |
| Data analyzed | Miscarriage | Stillbirth | Total |
| Overweight | 72 | 81 | 153 |
| Obese | 61 | 82 | 143 |
| Total | 133 | 163 | 296 |
| Chi-square |  |  |  |
| Chi-square, df | $0.4367,1$ |  |  |
| z | 0.6608 |  |  |
| P value | 0.5087 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Miscarriage | Stillburth | Total |
| Normal weight | 72 | 94 | 166 |
| Overwiehgt | 72 | 81 | 153 |
| Total | 144 | 175 | 319 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $0.01607,1$ |  |  |
| z | 0.1268 |  |  |
| P value | 0.8991 |  |  |
| P value summary | ns |  | 166 |
| One- or two-tailed | 133 | 176 | 309 |
| Statistically significant? (alpha<0.05) | Two-tailed |  |  |
| Data analyzed | No |  |  |
| BMI normal | 72 | 94 |  |
| BMI obese |  |  |  |
| Total |  |  |  |
|  |  |  |  |


| P value | 0.3897 |  |  |
| :--- | ---: | ---: | ---: |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Miscarriage | Stillbirth | Total |
| BMI underweight | 1 | 4 | 5 |
| BMI Normal | 205 | 257 | 462 |
| Total | 206 | 261 | 467 |

Fisher's exact test
$P$ value 0.3997

P value summary
ns
One- or two-tailed
Two-tailed
Statistically significant? (alpha<0.05) No

| Data analyzed | Miscarriage Stillbirth | Total |  |
| :--- | ---: | ---: | ---: |
| BMI underweight | 1 | 4 | 5 |
| BMI obese | 61 | 82 | 143 |
| Total | 62 | 86 | 148 |


| Chi-square |  |
| :--- | ---: |
| Chi-square, df | $12.40,4$ |
| P value | 0.0146 |
| P value summary | $*$ |
| One- or two-tailed | NA |
| Statistically significant? (alpha<0.05) | Yes |
| Data analyzed |  |
| Number of rows | 5 |
| Number of columns | 2 |

Fisher's exact test
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
Normal BMI
Obese
Total
< 0.0001
****
Two-tailed
Yes
National data Study population Total 275166
$116 \quad 143 \quad 259$
391
309

## Chi-square

| Chi-square, df | $19.16,1$ |
| :--- | ---: |
| z | 4.377 |
| P value | $<0.0001$ |
| P value summary | $* * * *$ |
| One- or two-tailed | Two-tailed |
| Statistically significant? (alpha<0.05) | Yes |


| Data analyzed | No of miscarriages No. of stillbirths | Total |  |
| :--- | :---: | ---: | ---: |
| Primigravida | 109 | 247 | 356 |
| Not primigravida | 287 | 354 | 641 |
| Total | 396 | 601 | 997 |

Chi-square

| Chi-square, df | $14.31,1$ |  |  |
| :--- | ---: | ---: | ---: |
| Z | 3.782 |  |  |
| P value | 0.0002 |  |  |
| P value summary | $* * *$ |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |
| Data analysed | Miscarriage | Stillbirth | Total |
| Primigravida | 109 | 247 | 356 |
| G1+P0 | 80 | 88 | 168 |
| Total | 189 | 335 | 524 |

Chi-square

| Chi-square, df | $12.56,1$ |  |  |
| :--- | ---: | ---: | ---: |
| z | 3.545 |  |  |
| P value | 0.0004 |  |  |
| P value summary | $* * *$ |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |
| Data analyzed | Miscarriages | Stillbirth | Total |
| PV bleeding | 42 | 28 | 70 |
| No PV bleeding | 383 | 611 | 994 |
| Total | 425 | 639 | 1064 |

Chi-square

| Chi-square, df | $13.99,1$ |
| :--- | ---: |
| Z | 3.740 |
| P value | 0.0002 |
| P value summary | $* * *$ |
| One- or two-tailed | Two-tailed |

Statistically significant? (alpha<0.05) Yes
Data analyzed Miscarriage
Maternal Fiobroids 30
No maternal fibroids 395
Total

| Stillbirth | Total |
| ---: | ---: |
| 15 | 45 |
| 624 | 1019 |
| 639 | 1064 |

Chi-square

| Chi-square, df | $14.48,1$ |
| :--- | ---: |
| z | 3.805 |
| P value | 0.0001 |
| P value summary | $* * *$ |
| One- or two-tailed | Two-tailed |
| Statistically significant? (alpha<0.05) | Yes |


| Statistically significant? (alpha<0.05) | Yes |  |  |
| :--- | ---: | ---: | ---: |
| Data analyzed | Miscarriages | Stillbirth | Total |
| IVF | 27 | 12 | 39 |
| Not IVF | 398 | 627 | 1025 |
| Total | 425 | 639 | 1064 |

Chi-square

| Chi-square, df | $5.811,1$ |
| :--- | ---: |
| z | 2.411 |
| P value | 0.0159 |

P value summary
One- or two-tailed
Two-tailed
Statistically significant? (alpha<0.05)
Yes
Data analyzed Miscarriage
No Diabetes 400
Diabetes
Total
Fisher's exact test
$P$ value
1.0000
$P$ value summary ns

| One- or two-tailed | Two-tailed |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Statistically significant? (alpha<0.05) | No |  |  |  |
| Data analyzed | Miscarriage | Stillbirth | Total |  |
| DM | 7 | 19 | 26 |  |
| Gestastional DM | 9 | 28 | 37 |  |
| Total | 16 | 47 | 63 |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Chi-square |  |  |  |  |
| Chi-square, df | $16.68,1$ |  |  |  |
| z | 4.085 |  |  |  |
| P value | $<0.0001$ |  |  |  |
| P value summary | $* * * *$ |  |  |  |
| One- or two-tailed | Two-tailed |  |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |  |
| Data analyzed | Miscarriage | Stillbirth | Total |  |
| Normal BP | 406 | 553 | 959 |  |
| Hypertension | 17 | 69 | 86 |  |
| Total | 423 | 622 | 1045 |  |

Fisher's exact test

| P value | 0.7731 |  |  |
| :--- | ---: | ---: | ---: |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Miscarriage | Stillbirth | Total |
| Chronic Hypertension | 6 | 19 | 25 |
| Pregnancy induced | 10 | 25 | 35 |
| Total | 16 | 44 | 60 |

## Fisher's exact test

$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analysed
Chronic Hypertension
Pre-eclampsia
Total

Fisher's exact test

| P value | 0.0173 |
| :--- | ---: |
| P value summary | $*$ |

One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
Pregnancy induced
Miscarriage Stillbirth
$10 \quad 25$
$1 \quad 25$
Pre-eclampsia 11

Total
35
26
61

## Chi-square

Chi-square, df
0.8830, 1

Z

### 0.0496

Two-tailed
Yes

Miscarriage Stillbirth Total
$\begin{array}{lll}6 & 19 & 25\end{array}$
$1 \quad 25 \quad 26$
$7 \quad 4451$

Page 33
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
Hypertension
No Hypertension
Total

Chi-square
Chi-square, df
Z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
No infection
Infection
Total

### 0.3474

ns

## Two-tailed

No
National data Study population Total

| 34244 | 60 | 34304 |
| ---: | ---: | ---: |
| 637011 | 985 | 637996 |

$637011 \quad 985637996$

671255104
672300

| Table Analyzed | Data 1 |  |
| :--- | ---: | :--- |
| Chi-square |  |  |
| Chi-square, df | $49.65,1$ |  |
| z | 7.046 |  |
| P value | $<0.0001$ |  |
| P value summary | $* * * *$ |  |
| One- or two-tailed | Two-tailed |  |
| Statistically significant? (alpha<0.05) | Yes | Total |
| Data analyzed | Ascending Infection Not ascending Infection | 137 |
| Black | 69 | 482 |
| Non-Black | 63 | 545 |
| Total | 132 | 619 |

## Chapter 4: Cause of Death

Table Analyzed Data 1
Chi-square
Chi-square, df 5.862, 1
z $\quad 2.421$
P value 0.0155
P value summary *
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Miscarriages Stillbirths Total
$\begin{array}{llll}\text { Abruption } & 8 & 30 & 38\end{array}$
Not Abruption $417 \quad 6091026$

| Total | 425 | 639 | 1064 |
| :--- | :--- | :--- | :--- |

Table Analyzed Data 3
Chi-square
Chi-square, df 5.707, 1
Z 2.389
$P$ value 0.0169
P value summary *
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Miscarriages Stillbirths Total

| Infection | 1 | 12 | 13 |
| :--- | :--- | :--- | :--- |

$\begin{array}{llll}\text { Not infection } & 424 & 627 & 1051\end{array}$
Total $425 \quad 6391064$

Table Analyzed Data 1
Chi-square
Chi-square, df 61.89, 1
z $\quad 7.867$
$P$ value < 0.0001
P value summary $\quad$ ****
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Miscarriages Stillbirths Total

| AI | 117 | 59 | 176 |
| :--- | ---: | :--- | :--- |
| Not AI 308 | 580 | 888 |  |
| Total | 425 | 639 | 1064 |

Table Analyzed Data 4
Chi-square
Chi-square, df 0.1693, 1
z $\quad 0.4114$
P value 0.6808
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed Miscarriages Stillbirths Total
$\begin{array}{llll}\text { Know CA } & 2 & 2 & 4\end{array}$
$\begin{array}{llll}\text { Not CA } & 423 & 637 & 1060\end{array}$
$\begin{array}{llll}\text { Total } & 425 & 639 & 1064\end{array}$

Table Analyzed Data 2
Chi-square
Chi-square, df 3.120, 1
z 1.766
P value 0.0773
P value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed Miscarriages Stillbirths Total

| CA 14 | 36 | 50 |  |
| :--- | :--- | :--- | :--- |
| Not CA | 411 | 603 | 1014 |
| Total 425 | 639 | 1064 |  |

Table Analyzed Data 5
Chi-square
Chi-square, df 22.33, 1
Z 4.725
$P$ value < 0.0001
P value summary $\quad * * * *$
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Miscarriages Stillbirths Total
$\begin{array}{llll}\text { Placenta } & 5 & 49 & 54\end{array}$
$\begin{array}{llll}\text { Not Placenta } & 420 & 590 & 1010\end{array}$
Total $425 \quad 639 \quad 1064$
Table Analyzed Data 6
Chi-square
Chi-square, df 2.642, 1
Z $\quad 1.625$
P value 0.1041
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed Miscarriages Stillbirths Total
$\begin{array}{llll}\text { Twin complication } & 12 & 9 & 21\end{array}$

| Not Twin | 413 | 630 | 1043 |
| :--- | :--- | :--- | :--- |
| Total | 425 | 639 | 1064 |

Table Analyzed Data 7

Chi-square
Chi-square, df 18.66, 1
z 4.32
$P$ value < 0.0001
P value summary $\quad * * * *$
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Miscarriages Stillbirths Total
$\begin{array}{llll}\text { Unexplained lesion } & 29 & 100 & 129\end{array}$
Other 396539935
$\begin{array}{llll}\text { Total } & 425 & 639 & 1064\end{array}$

Table Analyzed Data 8
Chi-square
Chi-square, df 0.4415, 1
z 0.6644
$P$ value 0.5064
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No

Data analyzed Miscarriages Stillbirths Total

| Unexplained obese | 36 | 47 | 83 |
| :--- | :--- | :--- | :--- |

Other 389592981
Total 4256391064

Table Analyzed Data 9
Chi-square
Chi-square, df 16.71, 1
z 4.088
P value< 0.0001
P value summary $\quad * * * *$
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Miscarriages Stillbirths Total
Unexplained with previous loss 594100
Other 366598964
Total 4256391064

Table Analyzed Data 10
Chi-square
Chi-square, df 0.7971, 1
Z 0.8928
P value 0.372
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No

| Data analyzed Miscarriages | Stillbirths |  | Total |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Unexplained unexplained | 123 | 169 | 292 |  |  |
| Other | 302 | 470 | 772 |  |  |
| Total | 425 | 639 | 1064 |  |  |

Table Analyzed Data 11
Chi-square
Chi-square, df 1.189, 1
Z 1.09
$P$ value 0.2756
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed Miscarriages Stillbirths Total
$\begin{array}{llll}\text { UE with DM } & 7 & 17 & 24\end{array}$

| Other | 418 | 622 |
| :--- | :--- | :--- |

$\begin{array}{llll}\text { Total } & 425 & 639 & 1064\end{array}$

Table Analyzed Data 12

Chi-square
Chi-square, df 2.023, 1
Z 1.422
P value 0.1549
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No

Data analyzed Miscarriages Stillbirths Total

| Black AI | 49 | 20 | 69 |
| :--- | :--- | :--- | :--- |

$\begin{array}{llll}\text { White AI } & 28 & 20 & 48\end{array}$
$\begin{array}{llll}\text { Total } & 77 & 40 & 117\end{array}$

Table Analyzed
Data 13
Chi-square
Chi-square, df 54.05, 1
z $\quad 7.352$
P value $<0.0001$
P value summary $\quad * * * *$
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Black White Total
$\begin{array}{llll}\text { AI } & 69 & 48 & 117\end{array}$
Not AI 137421558
Total 206469675

Table Analyzed Data 14
Chi-square
Chi-square, df 16.82, 1
Z 4.101
$P$ value < 0.0001
P value summary $\quad * * * *$
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes

Data analyzed White Other Total
UE 315147462
$\begin{array}{llll}\text { Other COD } & 154 & 135 & 289\end{array}$
Total $469 \quad 282 \quad 751$
Table Analyzed Data 17
Chi-square
Chi-square, df 4.989, 1
Z $\quad 2.234$
$P$ value 0.0255
P value summary *
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Mothers < 40 years old
Placental COD $50 \quad 6 \quad 56$
$\begin{array}{llll}\text { Other COD } & 941 & 42 & 983\end{array}$
Total 991481039
Table Analyzed Data 18
Chi-square
Chi-square, df 1.767, 1
z $\quad 1.329$
P value 0.1838
P value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05)
Data analyzed Mothers < 40 years old

| UE COD | 611 | 25 | 636 |
| :--- | :--- | :--- | :--- |
| Other COD | 380 | 23 | 403 |
| Total | 991 | 48 | 1039 |

Table Analyzed Data 3
Chi-square
Chi-square, df 6.627, 1
z 2.574
P value $\quad 0.0100$
$P$ value summary *
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed DM No DM Total
$\begin{array}{llll}\text { Twin complication } & 4 & 17 & 21\end{array}$
$\begin{array}{llll}\text { Not Twin } & 59 & 984 & 1043\end{array}$
$\begin{array}{llll}\text { Total } & 63 & 1001 & 1064\end{array}$
Table Analyzed Data 1
Chi-square
Chi-square, df $\quad 1.234,1$
z 1.111
$P$ value $\quad 0.2667$
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed DM No DM Total
Unexplained 43613656

| Not unexplained | 20388 | 408 |
| :---: | :---: | :---: |
| Total 631001 | 1064 |  |
| Table Analyzed | Data 2 |  |
| Chi-square |  |  |
| Chi-square, df | 0.7164, 1 |  |
| z 0.8464 |  |  |
| P value 0.3973 |  |  |
| P value summary | ns |  |
| One- or two-tailed | Two-tailed |  |
| Statistically significant? (alpha<0.05) |  |  |
| Data analyzed DM | No DM | Total |
| AI 8168 | 176 |  |
| Not AI 55833 | 888 |  |
| Total 631001 | 1064 |  |

Table Analyzed Data 4
Chi-square
Chi-square, df 1.448, 1
Z 1.203
$P$ value 0.2288
P value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed DM No DM Total
CA 14950
$\begin{array}{llll}\text { Not CA } & 62 \quad 952 & 1014\end{array}$

## Total 6310011064

Table Analyzed Data 5

Chi-square
Chi-square, df $0.1584,1$
Z 0.3980
P value 0.6906
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No

| Data analyzed DM | No DM |  | Total |
| :--- | :--- | :--- | :--- |
| Placenta COD 4 | 52 | 56 |  |
| Not Placenta COD | 59 | 949 | 1008 |

Total 6310011064

Table Analyzed Data 6

Chi-square
Chi-square, df $\quad 1.262,1$
Z $\quad 1.123$
$P$ value 0.2612
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No

| Data analyzed DM | Not DM |  | Total |  |
| :--- | :--- | :--- | :--- | :--- |
| Pre eclamp 2 | 14 | 16 |  |  |
| Not pre eclamp | 61 | 987 | 1048 |  |
| Total 63 | 1001 | 1064 |  |  |

Table Analyzed Data 7
Chi-square
Chi-square, df 6.501, 1
z $\quad 2.550$
P value 0.0108
P value summary *
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes

| Data analyzed BP |  | No BP Total |  |  |
| :--- | :--- | :--- | :--- | :--- |
| UE | 42 | 614 | 656 |  |
| Not UE | 44 | 364 | 408 |  |
| Total 86 | 978 | 1064 |  |  |

Table Analyzed Data 8
Chi-square
Chi-square, df $\quad 3.150,1$
z $\quad 1.775$
P value $\quad 0.0759$
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed BP No BP Total
$\begin{array}{llll}\text { Abruption } & 6 & 32 & 38\end{array}$
Not abruption $80 \quad 9461026$
$\begin{array}{llll}\text { Total } & 86 & 978 & 1064\end{array}$
Table Analyzed Data 9

| Chi-square |  |  |
| :---: | :---: | :---: |
| Chi-square, df | 3.552, 1 |  |
| z 1.885 |  |  |
| P value 0.0595 |  |  |
| P value summary | ns |  |
| One- or two-tailed Two-tailed |  |  |
| Statistically significant? (alpha<0.05) |  | No |
| Data analyzed BP | No BP Total |  |
| AI 8168 | 176 |  |
| Not AI78 810 | 888 |  |
| Total 86978 | 1064 |  |
| Table Analyzed | Data 10 |  |
| Chi-square |  |  |
| Chi-square, df | 1.177, 1 |  |
| z 1.085 |  |  |
| P value $\quad 0.2779$ |  |  |
| P value summary ns |  |  |
| One- or two-tailed Two-tailed |  |  |
| Statistically significant? (alpha<0.05) |  | No |
| Data analyzed BP | No BP Total |  |
| CA 248 | 50 |  |
| Not CA 84 | 9301014 |  |
| Total 86978 | 1064 |  |
| Table Analyzed | Data 11 |  |
| Chi-square |  |  |
| Chi-square, df | 0.9445, 1 |  |
| z 0.9719 |  |  |


P value summary $\quad * * * *$

One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes

Data analyzed Macerated Not macerated Total
UE COD 408128536
$\begin{array}{llll}\text { Other COD } & 162 & 196 & 358\end{array}$
Total 570324894

Table Analyzed
Data 2
Chi-square
Chi-square, df
Z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
Unexplained death
Not UE COD
17.36, 1
4.166
$<0.0001$
****

Total 411
Intrapartum stillbirth
Total

11
Total 411

Table Analyzed Data 1

Chi-square
Chi-square, df $12.83,1$
z $\quad 3.581$
P value 0.0003
P value summary
***
One- or two-tailed Two-tailed


## Chapter 5: Intrauterine Growth restriction and SGA

| Table Analyzed | Data 6 |  |  |
| :--- | ---: | ---: | ---: |
| Chi-square |  |  |  |
| Chi-square, df | $7.818,1$ |  |  |
| z | 2.796 |  |  |
| P value | 0.0052 |  |  |
| P value summary | $* *$ |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |
| Data analyzed | Non SGA | SGA | Total |
| CA COD | 11 | 17 | 28 |
| Not CA COD | 330 | 175 | 505 |
| Total | 341 | 192 | 533 |
|  |  |  |  |
| Table Analyzed | Data 5 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $34.77,1$ |  |  |
| z | 5.897 |  |  |
| P value | $<0.0001$ |  |  |
| P value summary | $* * * *$ |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Placental COD | 12 | 36 | 48 |
| Not Placental COD | 329 | 156 | 485 |
| Total | 341 | 192 | 533 |


| Chi-square |  |  |  |
| :--- | ---: | ---: | ---: |
| Chi-square, df | $31.16,1$ |  |  |
| z | 5.582 |  |  |
| P value | $<0.0001$ |  |  |
| P value summary | $* * * *$ |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Unexplained death | 243 | 90 | 333 |
| Not unexplained death | 98 | 102 | 200 |
| Total | 341 | 192 | 533 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| Table Analyzed |  |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $4.117,1$ |  |  |
| z | 2.029 |  |  |
| P value | 0.0425 |  |  |
| P value summary | $*$ |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Normal BMI | 43 | 36 | 79 |
| Not normal BMI | 104 | 49 | 153 |
| Total | 147 | 85 | 232 |
| Table Analyzed | Data |  |  |
| Chi-square |  |  |  |


| Chi-square, df | $1.027,1$ |  |  |
| :--- | ---: | ---: | ---: |
| z | 1.013 |  |  |
| P value | 0.3109 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Obese | 51 | 24 | 75 |
| Not obese | 96 | 61 | 157 |
| Total | 147 | 85 | 232 |
|  |  |  |  |
| Table Analyzed | Data 3 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $2.547,1$ |  |  |
| z | 1.596 |  |  |
| P value | 0.1105 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Overweight | 53 | 22 | 75 |
| Not overweight | 94 | 63 | 157 |
| Total | 147 | 85 | 232 |
|  |  |  |  |
| Table Analyzed | Data 17 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $5.256,1$ |  |  |
| z | 2.293 |  |  |
| P value | 0.0219 |  |  |


| P value summary | $*$ |  |  |
| :--- | ---: | ---: | ---: |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | Yes |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Underweight | 0 | 3 | 3 |
| Not underweight | 147 | 82 | 229 |
| Total | 147 | 85 | 232 |
| Table Analyzed |  |  |  |
| Chi-square | Data 8 |  |  |
| Chi-square, df | $0.09829,1$ |  |  |
| z | 0.3135 |  |  |
| P value | 0.7539 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Black | 57 | 32 | 89 |
| Not black | 201 | 122 | 323 |
| Total | 258 | 154 | 412 |
|  |  |  |  |
| Table Analyzed | Data 10 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $1.363,1$ |  |  |
| z | 1.167 |  |  |
| P value | 0.2430 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
|  |  |  |  |


| Data analyzed | Non SGA | SGA | Total |
| :--- | ---: | ---: | ---: |
| DM | 29 | 11 | 40 |
| No DM | 312 | 181 | 493 |
| Total | 341 | 192 | 533 |
|  |  |  |  |
| Table Analyzed | Data 11 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $0.1881,1$ |  |  |
| z | 0.4337 |  |  |
| P value | 0.6645 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Gest DM | 18 | 6 | 24 |
| Other DM | 11 | 5 | 16 |
| Total | 29 | 11 | 40 |
|  |  |  |  |
|  |  |  |  |
| Table Analyzed | Data 12 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $0.1770,1$ |  |  |
| z | 0.4207 |  |  |
| P value | 0.6740 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Hypertension | 34 | 17 | 51 |


| No hypertension | 307 | 175 | 482 |
| :--- | ---: | ---: | ---: |
| Total | 341 | 192 | 533 |
| Table Analyzed | Data 13 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $3.279,1$ |  |  |
| z | 1.811 |  |  |
| P value | 0.0702 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Non SGA | SGA | Total |
| Preeclampsia | 11 | 10 | 21 |
| Other hypertension | 23 | 7 | 30 |
| Total | 34 | 17 | 51 |
|  |  |  |  |
| Table Analyzed | Data 14 |  |  |
| Chi-square |  |  |  |
| Chi-square, df | $0.01724,1$ |  |  |
| z | 0.1313 |  |  |
| P value | 0.8955 |  |  |
| P value summary | ns |  |  |
| One- or two-tailed | Two-tailed |  |  |
| Statistically significant? (alpha<0.05) | No |  |  |
| Data analyzed | Non SGA | SGA | Total |
| age < 35 | 253 | 139 | 392 |
| Age equal to or greater than 35 | 85 | 48 | 133 |
| Total | 338 | 187 | 525 |
|  |  |  |  |

Table Analyzed

Chi-square
Chi-square, df
Z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
Maceration
No maceration
Total

Table Analyzed
Chi-square
Chi-square, df
Z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant? (alpha<0.05)
Data analyzed
Daceration excluding AI
No maceration excluding AI
Total

Data 16
4.081, 1
2.020
0.0434

Two-tailed
Yes Non SGA 241
56
297

Data 15

### 6.608, 1

2.571
0.0102

Two-tailed Yes

Non SGA SGA Total
$\begin{array}{lll}256 & 163 & 419\end{array}$
$\begin{array}{lll}79 & 27 & 106\end{array}$
$335 \quad 190 \quad 525$

SGA Total
157398
$21 \quad 77$
$\qquad$

Table Analyzed
Chi-square
Chi-square, df
Z
$P$ value
P value summary
One- or two-tailed
Statistically significant? (alpha<0.05)

| IUI 1 or fewer days | 202 | 24 | 226 |
| :--- | ---: | ---: | ---: |
| IUI $>1$ day | 13 | 136 | 149 |
| Total | 215 | 160 | 375 |

Data 1
238.8, 1
15.45
< 0.0001
****
Two-tailed
Yes
$x^{2}$ 160

## Polynomial regression

Intercept $\quad \mathrm{b} 0=-0.494843 \quad \mathrm{t}=-4.186782 \mathrm{P}<0.0001$
Intrauterine interval $\quad \mathrm{b} 1=-0.117993 \mathrm{r}=-0.205311 \mathrm{t}=-3.663653 \mathrm{P}=0.0003$
Intrauterine interval^2b2 $=0.001016 \mathrm{r}=0.084641 \quad \mathrm{t}=1.483518 \mathrm{P}=0.139$
$=-0.494843-0.117993$ Intrauterine interval +0.001016 Intrauterine interval^$\wedge 2$
Simple linear regression
Equation: Delat Value Birthweight $=-0.07535$ Intrauterine interval -0.581278
Standard Error of slope $=0.014554$
$95 \% \mathrm{CI}$ for population value of slope $=-0.103989$ to -0.046711

Correlation coefficient $(\mathrm{r})=-0.28379\left(\mathrm{r}^{2}=0.080537\right)$
$95 \%$ CI for r (Fisher's z transformed) $=-0.383389$ to -0.177667
t with $306 \mathrm{DF}=-5.177154$
Two sided $\mathrm{P}<0.0001$
Power (for 5\% significance) $=99.91 \%$
Correlation coefficient is significantly different from zero

Table Analyzed
Chi-square
Chi-square, df
z
$P$ value
$P$ value summary
One- or two-tailed
Statistically significant?
(alpha<0.05)

Data analyzed
0 days
$>2$ days
Total

Data 2
11.05,

1
3.324
0.0009
***
Two-
tailed
Yes
Non
SGA SGA Total
$16 \quad 76$
$52 \quad 117$

Simple linear regression

Equation: $\mathrm{B}=-1.108091 \mathrm{~A}-3.506909$
Standard Error of slope $=0.16928$
$95 \%$ CI for population value of slope $=-1.49103$ to -
0.725152

Correlation coefficient $(r)=-0.909075\left(\mathrm{r}^{2}=0.826418\right)$
95\% CI for $\mathrm{r}($ Fisher's z transformed $)=-0.976457$ to -
0.680057
t with $9 \mathrm{DF}=-6.545893$
Two sided $\mathrm{P}=0.0001$
Power (for 5\% significance) $=98.77 \%$
Correlation coefficient is significantly different from zero

## Chapter 6 Organ Weights:

## Females:

Mann-Whitney U test
Observations (x) in Normal Delta Female combined adrenal weight $=56$ median $=-0.172591$ rank sum = 3,338.5
Observations (y) in Overweight Delta Female combined adrenal weight $=70$ median $=-0.082449$

## $\mathrm{U}=1,742.5 \quad \mathrm{U}^{\prime}=2,177.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1436$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8564(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$

Two sided $\mathrm{P}=0.2872$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.555485(95 \%$ CI: 0.454167 to 0.651551$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.12903$ (CI: -0.39045 to 0.10843 )
Mann-Whitney U test
Observations (x) in Normal Delta Female combined adrenal weight $=56$ median $=-0.172591$ rank sum $=2,664$
Observations (y) in Obese Delta Female combined adrenal weight $=48$ median $=-0.051566$
$\mathrm{U}=1,068 \quad \mathrm{U}^{\prime}=1,620$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.036$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.964$ ( H : x tends to be greater than y )
Two sided $\mathrm{P}=0.0721$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.602679$ ( $95 \%$ CI: 0.490877 to 0.703003 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.291715$ (CI: -0.67878 to 0.02994 )

Mann-Whitney U test not signif
Observations (x) in Overweight Delta Female combined adrenal weight $=70$ median $=-0.082449$ rank sum $=3,992.5$
Observations (y) in Obese Delta Female combined adrenal weight $=48$ median $=-0.051566$
$\mathrm{U}=1,507.5 \quad \mathrm{U}^{\prime}=1,852.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1734(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.8266$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.3467$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.551339(95 \%$ CI: 0.445628 to 0.651766$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.123145(\mathrm{CI}:-0.41642$ to 0.12314$)$

Mann-Whitney U test- not signif
Observations ( x ) in Obese Delta Female combined adrenal weight $=48$ median $=-0.051566$ rank sum
$=1,317$
Observations (y) in Underweight Delta Female combined adrenal weight $=7$ median $=0.467499$
$\mathrm{U}=141 \quad \mathrm{U}^{\prime}=195$
Exact probability:
Lower side $\mathrm{P}=0.2557(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.7443$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.5115$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.580357$ ( $95 \%$ CI: 0.3604 to 0.768881 )
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.28512(\mathrm{CI}:-0.90202$ to 0.35381$)$

Mann-Whitney U test not signif

Observations (x) in Hypertension Delta Female combined adrenal weight $=32$ median $=-0.26252$ rank sum $=5,183.5$
Observations (y) in No Hypertension Delta Female combined adrenal weight $=361$ median $=-0.069463$
$\mathrm{U}=4,655.5 \quad \mathrm{U}^{\prime}=6,896.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0344$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9656(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.0688$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.596996(95 \% \mathrm{CI}: 0.49252$ to 0.69188$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.286455(\mathrm{CI}:-0.60687$ to 0.02167 )
Mann-Whitney U test DM vs no DM - SIGNIFICANT!
Observations (x) in DM Delta Female combined adrenal weight $=26$ median $=0.124918$ rank sum $=$ 6,393
Observations (y) in No DM Delta Female combined adrenal weight $=374$ median $=-0.090509$
$U=6,042 \quad U^{\prime}=3,682$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.019$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.981(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.038$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.378651(95 \% \mathrm{CI}: 0.278013$ to 0.493536$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.34291(\mathrm{CI}: 0.01708$ to 0.70087$)$

Mann-Whitney U test significant!
Observations (x) in SGA Delta Female combined adrenal weight $=77$ median $=-0.70161$ rank sum $=$ 6,032.5
Observations (y) in Non SGA Delta Female combined adrenal weight $=140$ median $=0.152456$
$\mathrm{U}=3,029.5 \quad \mathrm{U}^{\prime}=7,750.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.71897(95 \% \mathrm{CI}: 0.642546$ to 0.782859$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.81702(\mathrm{CI}:-1.09755$ to -0.54071$)$
Mann-Whitney U test UE vs Placenta SIGNIFICANT!
Observations ( x ) in COD UE Delta Female combined adrenal weight $=243$ median $=-0.102677$ rank sum $=33,352.5$
Observations (y) in COD Placenta Delta Female combined adrenal weight $=19$ median $=-0.840703$
$\mathrm{U}=3,706.5 \quad \mathrm{U}^{\prime}=910.5$
Normalised statistic $=4.394824$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y)
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.197206$ ( $95 \%$ CI: 0.116704 to 0.321547 )
$95 \%$ confidence interval for difference between medians or means:

Median difference $=0.74169$ (CI: 0.4646 to 1.02246 )
Mann-Whitney U test UE vs AI SIGNIFICANT!
Observations ( x ) in COD AI Delta Female combined adrenal weight $=71$ median $=0.301883$ rank sum $=14,202.5$
Observations (y) in COD UE Delta Female combined adrenal weight $=243$ median $=-0.102677$
$\mathrm{U}=11,646.5 \quad \mathrm{U}^{\prime}=5,606.5$
Normalised statistic $=4.48757$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.324958(95 \% \mathrm{CI}: 0.259689$ to 0.399514$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.42986$ (CI: 0.24684 to 0.6228 )
Mann-Whitney U test
Observations ( x ) in Normal Delta Female Brain weight $=51$ median $=0.063564$ rank sum $=2,671$
Observations (y) in Ow Delta Female Brain weight $=62$ median $=0.029946$
$\mathrm{U}=1,345 \quad \mathrm{U}^{\prime}=1,817$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0872(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9128$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.1744$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.574636(95 \%$ CI: 0.467482 to 0.674005$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.219975$ (CI: -0.53589 to 0.10011 )
Mann-Whitney U test - OW vs obese - not signif
Observations ( x ) in Overweight Delta Female Brain weight $=62$ median $=0.029946$ rank sum $=3,566$
Observations (y) in Obese Delta Female Brain weight $=49$ median $=0.10659$
$\mathrm{U}=1,613 \quad \mathrm{U}^{\prime}=1,425$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2896$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7104$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.5791$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.469059(95 \%$ CI: 0.365272 to 0.576156$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.089495$ (CI: -0.21913 to 0.37218 )

Mann-Whitney U test
Observations (x) in Normal Delta Female Brain weight $=51$ median $=0.063564$ rank sum $=2,439$
Observations (y) in Obese Delta Female Brain weight $=49$ median $=0.10659$
$\mathrm{U}=1,113 \quad \mathrm{U}^{\prime}=1,386$
Exact probability:
Lower side $\mathrm{P}=0.175$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.825$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.3499$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.554622(95 \%$ CI: 0.441814 to 0.661078$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.13872(\mathrm{CI}:-0.52784$ to 0.14719$)$

Mann-Whitney U test - UW vs obese - not signif
Observations (x) in Obese Delta Female Brain weight $=49$ median $=0.10659$ rank sum $=1,367$
Observations (y) in Underweight Delta Female Brain weight $=6$ median $=0.021449$
$\mathrm{U}=142 \quad \mathrm{U}^{\prime}=152$
Exact probability:
Lower side $\mathrm{P}=0.4529$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.5471(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.9058(\mathrm{H} 1$ : x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.517007(95 \% \mathrm{CI}: 0.295697$ to 0.730932$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.0299(\mathrm{CI}:-0.60158$ to 0.6677$)$

Mann-Whitney U test BP vs no BP - Not signif

Observations (x) in Hypertension Delta Female Brain weight $=32$ median $=-0.26092$ rank sum $=$ 4,913
Observations (y) in No Hypertension Delta Female Brain weight $=339$ median $=0.103008$
$\mathrm{U}=4,385 \quad \mathrm{U}^{\prime}=6,463$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0366$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9634(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0732$ ( H 1 : x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.595778(95 \% \mathrm{CI}: 0.491024$ to 0.691009$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.312325(\mathrm{CI}:-0.60533$ to 0.02843$)$
Mann-Whitney U test - DM vs No DM - not signif

Observations (x) in DM Delta Female Brain weight $=25$ median $=0.143121$ rank sum $=4,981.5$
Observations (y) in No DM Delta Female Brain weight $=353$ median $=0.074711$
$\mathrm{U}=4,656.5 \quad \mathrm{U}^{\prime}=4,168.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.323$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.677$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.6461$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.472351(95 \% \mathrm{CI}: 0.360716$ to 0.587407$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.10196(\mathrm{CI}:-0.32015$ to 0.50549$)$

## Mann-Whitney U test - SIGNIFICANT!

Observations (x) in SGA Delta Female Brain weight $=74$ median $=-0.638087$ rank sum $=4,627.5$
Observations (y) in Non SGA Delta Female Brain weight $=136$ median $=0.331463$
$\mathrm{U}=1,852.5 \quad \mathrm{U}^{\prime}=8,211.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )

Upper side $\mathrm{P}>0.9999(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.815928(95 \%$ CI: 0.746644 to 0.867806$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-1.04984(\mathrm{CI}:-1.3141$ to -0.79584$)$

## Mann-Whitney U test AI vs UE - SIGNIFICANT

Observations (x) in AI COD Delta Female Brain weight $=67$ median $=0.280978$ rank sum $=12,236$
Observations (y) in UE COD Delta Female Brain weight $=229$ median $=-0.030258$
$\mathrm{U}=9,958 \quad \mathrm{U}^{\prime}=5,385$
Normalised statistic $=3.710468$ (adjusted for ties)
Lower side $\mathrm{P}=0.9999(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0002$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.350974$ ( $95 \% \mathrm{CI}: 0.281689$ to 0.428715 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.31601$ (CI: 0.15341 to 0.47237 )

Mann-Whitney U test UE vs Placenta - SIGNIFICANT!
Observations (x) in UE COD Delta Female Brain weight $=229$ median $=-0.030258$ rank sum $=29,390$
Observations (y) in Placenta COD Delta Female Brain weight $=18$ median $=-0.890347$
$\mathrm{U}=3,055 \quad \mathrm{U}^{\prime}=1,067$

Normalised statistic $=3.405628$ (adjusted for ties)
Lower side $\mathrm{P}=0.9997$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.0003$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0007$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.258855(95 \%$ CI: 0.162111 to 0.393792$)$

95\% confidence interval for difference between medians or means:
Median difference $=0.7991$ (CI: 0.35673 to 1.20795)

## Mann-Whitney U test AI vs UE - SIGNIFICANT

Observations (x) in AI COD Delta Female Heart Weight $=71$ median $=0.230766$ rank sum $=14,099$
Observations (y) in UE COD Delta Female Heart Weight $=245$ median $=-0.088788$
$\mathrm{U}=11,543 \quad \mathrm{U}^{\prime}=5,852$
Normalised statistic $=4.197672$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y)
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.336419$ ( $95 \%$ CI: 0.270217 to 0.411325 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.30866$ (CI: 0.17215 to 0.44183 )

Mann-Whitney U test UE vs placenta - SIGNIFICANT!

Observations (x) in UE COD Delta Female Heart Weight $=245$ median $=-0.088788$ rank sum $=$ 33,556
Observations (y) in Placenta COD Delta Female Heart Weight $=19$ median $=-0.839286$
$\mathrm{U}=3,421 \quad \mathrm{U}^{\prime}=1,234$
Normalised statistic $=3.410572($ adjusted for ties $)$
Lower side $\mathrm{P}=0.9997$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.0003$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0006$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.265091(95 \%$ CI: 0.169134 to 0.39654$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.66969$ (CI: 0.26217 to 1.02774 )
Mann-Whitney U test- significant!
Observations ( x ) in SGA Delta Female Heart Weight $=79$ median $=-0.836017$ rank sum $=5,534.5$
Observations (y) in Non SGA Delta Female Heart Weight $=142$ median $=0.156719$
$\mathrm{U}=2,374.5 \quad \mathrm{U}^{\prime}=8,843.5$

Normalised statistic $=-7.100095($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.788331(95 \%$ CI: 0.718267 to 0.843001$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.953105$ (CI: -1.19299 to -0.70379 )

Mann-Whitney U test not signif

Observations (x) in Overweight Delta Female Heart Weight $=70$ median $=-0.050529$ rank sum $=$ 4,278.5
Observations (y) in Obese Delta Female Heart Weight $=49$ median $=-0.059402$
$\mathrm{U}=1,793.5 \quad \mathrm{U}^{\prime}=1,636.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3369$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.6631$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.6738(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.477114(95 \% \mathrm{CI}: 0.375326$ to 0.581236$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.038985(\mathrm{CI}:-0.13798$ to 0.26509$)$

Mann-Whitney U test- significant

Observations (x) in Normal Delta Female Heart Weight $=58$ median $=-0.152206$ rank sum $=3,318$
Observations (y) in Overweight Delta Female Heart Weight $=70$ median $=-0.050529$
$\mathrm{U}=1,607 \quad \mathrm{U}^{\prime}=2,453$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0214$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9786$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0427$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.604187(95 \% \mathrm{CI}: 0.503337$ to 0.695438$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.21717(\mathrm{CI}:-0.48458$ to -0.00679$)$

## Mann-Whitney U test

Observations (x) in Normal Delta Female Heart Weight $=58$ median $=-0.152206$ rank sum $=2,898$
Observations (y) in Obese Delta Female Heart Weight $=49$ median $=-0.059402$

$$
\mathrm{U}=1,187 \quad \mathrm{U}^{\prime}=1,655
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0722(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9278$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.1444$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.582336$ ( $95 \%$ CI: 0.472248 to 0.683417 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.172455$ (CI: -0.42931 to 0.0666 )

## Mann-Whitney U test not signif

Observations (x) in Obese Delta Female Heart Weight $=49$ median $=-0.059402$ rank sum $=1,401$
Observations (y) in Underweight Delta Female Heart Weight $=7$ median $=-0.040636$

## $\mathrm{U}=176$ <br> ```U'=167```

Exact probability:
Lower side $\mathrm{P}=0.4614(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.5386$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.9228$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.48688(95 \%$ CI: 0.28327 to 0.695631$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.02455(\mathrm{CI}:-0.4854$ to 0.49493 )

Mann-Whitney U test not signif
Observations (x) in Hypertension Delta Female Heart Weight $=32$ median $=-0.282429$ rank sum $=$ 5,576
Observations (y) in No Hypertension Delta Female Heart Weight $=365$ median $=-0.03416$
$\mathrm{U}=5,048 \quad \mathrm{U}^{\prime}=6,632$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1022$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8978$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.2043$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.567808(95 \%$ CI: 0.463702 to 0.665179$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.18936($ CI: -0.4617 to 0.1014$)$

Mann-Whitney U test - not significant
Observations (x) in DM Delta Female Heart Weight $=26$ median $=0.223645$ rank sum $=6,288.5$
Observations (y) in No DM Delta Female Heart Weight $=372$ median $=-0.052107$
$\mathrm{U}=5,937.5 \quad \mathrm{U}^{\prime}=3,734.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0259$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9741$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0518$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.386115(95 \% \mathrm{CI}: 0.284598$ to 0.501032$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.2722$ (CI: -0.00208 to 0.56195 )

Mann-Whitney U test - SGA vs no SGA - SIGNIFICANT!
SGA lighter kidneys
Observations (x) in SGA Delta Female Combined Kidney weight $=25$ median $=-0.635751$ rank sum $=$ 633.5

Observations (y) in Non SGA Delta Female Combined Kidney weight $=53$ median $=0.146467$
$\mathrm{U}=308.5 \quad \mathrm{U}^{\prime}=1,016.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.76717(95 \%$ CI: 0.635216 to 0.857875$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.89608(\mathrm{CI}:-1.41407$ to -0.40342$)$

Mann-Whitney U test UE vs AI SIGNIFICANT!
UE LIGHTER kidneys
Observations (x) in COD AI Delta Female Combined Kidney weight $=34$ median $=0.193943$ rank
sum $=3,122$
Observations (y) in COD UE Delta Female Combined Kidney weight $=101$ median $=-0.146857$
$\mathrm{U}=2,527 \quad \mathrm{U}^{\prime}=907$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.264123$ ( $95 \%$ CI: 0.181443 to 0.372199 )
95\% confidence interval for difference between medians or means:
Median difference $=0.408495$ (CI: 0.24186 to 0.61641 )

## Mann-Whitney U test NOT SIGNIF

Observations (x) in COD UE Delta Female Combined Kidney weight $=101$ median $=-0.146857$ rank sum $=5,564$
Observations (y) in COD placenta Delta Female Combined Kidney weight $=6$ median $=-0.622944$
$\mathrm{U}=413 \quad \mathrm{U}^{\prime}=193$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0704(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9296$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.1407$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.318482(95 \%$ CI: 0.155171 to 0.555541$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.460715(\mathrm{CI}:-0.20035$ to 1.31992$)$

Mann-Whitney U test not signif

Observations (x) in Overweight Delta Female Combined Kidney weight $=21$ median $=-0.047563$ rank sum $=462.5$
Observations (y) in Obese Delta Female Combined Kidney weight $=22$ median $=-0.075647$
$\mathrm{U}=231.5 \quad \mathrm{U}^{\prime}=230.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4976$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.5024(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.9952$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.498918(95 \%$ CI: 0.33586 to 0.662245$)$

95\% confidence interval for difference between medians or means:
Median difference $=0.00465(\mathrm{CI}:-0.38905$ to 0.32497$)$
Mann-Whitney U test

Observations (x) in Overweight Delta Female Combined Kidney weight $=21$ median $=-0.047563$ rank sum $=461$
Observations (y) in Normal Delta Female Combined Kidney weight $=18$ median $=-0.176295$
$\mathrm{U}=230 \quad \mathrm{U}^{\prime}=148$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1271$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8729(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.2541$ ( H 1 : x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.391534(95 \% \mathrm{CI}: 0.239119$ to 0.573201$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.174135(\mathrm{CI}:-0.12053$ to 0.49912 )

## Mann-Whitney U test

Observations (x) in Normal Delta Female Combined Kidney weight $=18$ median $=-0.176295$ rank sum = 326
Observations (y) in Obese Delta Female Combined Kidney weight $=22$ median $=-0.075647$

$$
\mathrm{U}=155 \quad \mathrm{U}^{\prime}=241
$$

Exact probability:
Lower side $\mathrm{P}=0.1255$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.8745(\mathrm{H}: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.251$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.608586$ ( $95 \%$ CI: 0.428766 to 0.759649 )
95.2\% confidence interval for difference between medians or means:

Median difference $=-0.19761$ (CI: -0.82082 to 0.15592 )

## Mann-Whitney U test not signif

Observations (x) in Obese Delta Female Combined Kidney weight $=22$ median $=-0.075647$ rank sum = 302
Observations (y) in Underweight Delta Female Combined Kidney weight $=4$ median $=-0.12436$

## $\mathrm{U}=49$ <br> $$
\mathrm{U}^{\prime}=39
$$

Exact probability:
Lower side $\mathrm{P}=0.3789(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6211$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.7579$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(U^{\prime} / \mathrm{mn}\right)=0.443182(95 \%$ CI: 0.20127 to 0.719305$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=0.130725$ (CI: -0.43335 to 1.2048)
Mann-Whitney U test not signif
Observations ( x ) in Hypertension Delta Female Combined Kidney weight $=12$ median $=-0.177341$
rank sum $=881$
Observations (y) in No Hypertension Delta Female Combined Kidney weight $=148$ median $=-0.075385$
$\mathrm{U}=803 \quad \mathrm{U}^{\prime}=973$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2938$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.7062(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.5876$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.54786(95 \%$ CI: 0.383214 to 0.701015$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.10496$ (CI: -0.5165 to 0.30811 )
Mann-Whitney U test not signif
Observations (x) in DM Delta Female Combined Kidney weight $=9$ median $=0.23063$ rank sum $=$ 894.5

Observations (y) in No DM Delta Female Combined Kidney weight $=150$ median $=-0.079417$
$\mathrm{U}=849.5 \quad \mathrm{U}^{\prime}=500.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0987$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9013$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.1973$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.370741(95 \% \mathrm{CI}: 0.216298$ to 0.5636$)$
95.1\% confidence interval for difference between medians or means:

Median difference $=0.25271$ (CI: -0.15278 to 0.6188)
Mann-Whitney U test OW vs Obese - not signif
Observations ( x ) in Overweight Delta Female Liver weight $=70$ median $=-0.071169$ rank sum $=4,193$
Observations (y) in Obese Delta Female Liver weight $=48$ median $=-0.101251$
$\mathrm{U}=1,708 \quad \mathrm{U}^{\prime}=1,652$
Exact probability:
Lower side $\mathrm{P}=0.4404$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.5596$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.8807$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.491667(95 \%$ CI: 0.388437 to 0.595756$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.014775$ (CI: -0.2209 to 0.2634 )

## Mann-Whitney U test

Observations (x) in OW Delta Female Liver weight $=70$ median $=-0.071169$ rank sum $=4,847.5$
Observations (y) in Normal Delta Female Liver weight $=57$ median $=-0.172186$
$\mathrm{U}=2,362.5 \quad \mathrm{U}^{\prime}=1,627.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0375$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9625$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.075$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.407895(95 \% \mathrm{CI}: 0.315163$ to 0.509213$)$
$95 \%$ confidence interval for difference between medians or means
Median difference $=0.211075(\mathrm{CI}:-0.02094$ to 0.47607 )

Mann-Whitney U test

Observations (x) in Normal Delta Female Liver weight $=57$ median $=-0.172186$ rank sum $=2,800$
Observations (y) in Obese Delta Female Liver weight $=48$ median $=-0.101251$
$\mathrm{U}=1,147 \quad \mathrm{U}^{\prime}=1,589$
Exact probability:
Lower side $\mathrm{P}=0.0783$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9217(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.1567$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.580775(95 \% \mathrm{CI}: 0.469658$ to 0.682892$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.204305(\mathrm{CI}:-0.51985$ to 0.07187$)$

Mann-Whitney U test - UW vs obese - not signif
Observations ( x ) in Obese Delta Female Liver weight $=48$ median $=-0.101251$ rank sum $=1,347$
Observations (y) in Underweight Delta Female Liver weight $=7$ median $=0.037788$

## $\mathrm{U}=171 \quad \mathrm{U}^{\prime}=165$

Exact probability:
Lower side $\mathrm{P}=0.4754$ (H1: x tends to be less than y )

Upper side $\mathrm{P}=0.5246(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.9508$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.491071(95 \% \mathrm{CI}: 0.286366$ to 0.699282$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.041015(\mathrm{CI}:-0.50678$ to 0.95118$)$

Mann-Whitney U test - BP vs no BP not signif.
Observations (x) in Hypertension Delta Female Liver weight $=32$ median $=-0.373011$ rank sum $=$ 5,678
Observations (y) in No Hypertension Delta Female Liver weight $=363$ median $=-0.053425$
$\mathrm{U}=5,150 \quad \mathrm{U}^{\prime}=6,466$
Exact probability:
Lower side $\mathrm{P}=0.1448$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.8552$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.2897$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.556646(95 \% \mathrm{CI}: 0.45275$ to 0.654904$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.176975(\mathrm{CI}:-0.47067$ to 0.20638$)$

Mann-Whitney U test DM vs no DM - not signif
Observations (x) in DM Delta Female Liver weight $=26$ median $=0.296685$ rank sum $=6,134$
Observations (y) in No DM Delta Female Liver weight $=370$ median $=-0.064725$
$\mathrm{U}=5,783 \quad \mathrm{U}^{\prime}=3,837$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0424(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9576$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0847$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.398857(95 \%$ CI: 0.295912 to 0.513742$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.30592$ (CI: -0.04932 to 0.66489)
Mann-Whitney U test SGA vs Non SGA - SIGNIFICANT!
Observations ( x ) in SGA Delta Female Liver weight $=78$ median $=-0.725493$ rank sum $=5,203$
Observations ( y ) in Non SGA Delta Female Liver weight $=141$ median $=0.200112$
$\mathrm{U}=2,122 \quad \mathrm{U}^{\prime}=8,876$
Exact probability:
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.807056$ ( $95 \% \mathrm{CI}: 0.738552$ to 0.859264 )
95\% confidence interval for difference between medians or means:
Median difference $=-1.07867$ (CI: -1.36389 to -0.81145 )

## Mann-Whitney U test - AI vs UE - SIGNIFICANT!

Observations (x) in AI COD Delta Female Liver weight $=72$ median $=0.212789$ rank sum $=15,045$
Observations (y) in UE COD Delta Female Liver weight $=243$ median $=-0.114714$
$\mathrm{U}=12,417 \quad \mathrm{U}^{\prime}=5,079$
Normalised statistic $=5.40537$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}<0.0001(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.290295(95 \%$ CI: 0.22861 to 0.362801$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.40625$ (CI: 0.27037 to 0.56788 )

## Mann-Whitney U test UE vs placenta - SIGNIFICANT!

Observations (x) in UE COD Delta Female Liver weight $=243$ median $=-0.114714$ rank sum $=33,199$
Observations (y) in Placenta COD Delta Female Liver weight $=19$ median $=-0.867218$
$\mathrm{U}=3,553 \quad \mathrm{U}^{\prime}=1,064$
Normalised statistic $=3.912261$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}<0.0001$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.230453(95 \% \mathrm{CI}: 0.141993$ to 0.358849$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.76036$ (CI: 0.41272 to 1.13375 )
Mann-Whitney U test SGA vs non SGA - significant
SGA lungs lighter
Observations ( x ) in SGA Delta Female Combined lung weight $=19$ median $=-0.888811$ rank sum $=$

## 331

Observations (y) in Non SGA Delta Female Combined lung weight $=49$ median $=0.072513$
$\mathrm{U}=141 \quad \mathrm{U}^{\prime}=790$
Exact probability:
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.84855(95 \%$ CI: 0.711756 to 0.923393$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=-1.09147$ (CI: -1.61693 to -0.66596 )

Mann-Whitney U test AI vs UE -SIGNIFICANT!
AI lungs heavier
Observations (x) in COD AI Delta Female Combined lung weight $=24$ median $=0.514076$ rank sum $=$ 1,825.5
Observations (y) in COD UE Delta Female Combined lung weight $=80$ median $=-0.197505$
$\mathrm{U}=1,525.5 \quad \mathrm{U}^{\prime}=394.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.205469$ ( $95 \%$ CI: 0.1241 to 0.328099 )
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.7622$ (CI: 0.42674 to 1.07766 )

Mann-Whitney U test not signif
Observations (x) in COD UE Delta Female Combined lung weight $=80$ median $=-0.197505$ rank sum = 3,510
Observations (y) in COD Placenta Delta Female Combined lung weight $=5$ median $=-0.734496$
$\mathrm{U}=270 \quad \mathrm{U}^{\prime}=130$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1003$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8997$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.2006$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.325(95 \% \mathrm{CI}: 0.148947$ to 0.582945$)$
95.1\% confidence interval for difference between medians or means:

Median difference $=0.54767$ (CI: -0.27318 to 1.45151)
Mann-Whitney U test not signif
Observations (x) in Overweight Delta Female Combined lung weight $=14$ median $=-0.043932$ rank sum $=243$
Observations (y) in Obese Delta Female Combined lung weight $=17$ median $=-0.133709$

## $\mathrm{U}=138$ <br> $\mathrm{U}^{\prime}=100$

Exact probability:
Lower side $\mathrm{P}=0.2341(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.7659$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.4683$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.420168(95 \%$ CI: 0.246245 to 0.620348$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=0.19114$ (CI: -0.38766 to 0.67943 )

## Mann-Whitney U test

Observations (x) in Normal Delta Female Combined lung weight $=15$ median $=-0.253646$ rank sum $=$ 234
Observations (y) in Obese Delta Female Combined lung weight $=17$ median $=-0.133709$
$\mathrm{U}=114$
$\mathrm{U}^{\prime}=141$
Exact probability:
Lower side $\mathrm{P}=0.314$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.686$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6281$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.552941(95 \% \mathrm{CI}: 0.359222$ to 0.729731$)$
95.1\% confidence interval for difference between medians or means:

Median difference $=-0.2043$ (CI: -1.21901 to 0.44754 )
Mann-Whitney U test
Observations (x) in Overweight Delta Female Combined lung weight $=14$ median $=-0.043932$ rank sum $=232$
Observations (y) in Normal Delta Female Combined lung weight $=15$ median $=-0.253646$

## $\mathrm{U}=127 \quad \mathrm{U}^{\prime}=83$

Exact probability:
Lower side $\mathrm{P}=0.1768(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.8232(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.3536$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.395238(95 \%$ CI: 0.222966 to 0.603548$)$
95.4\% confidence interval for difference between medians or means:

Median difference $=0.230345$ (CI: -0.24936 to 1.04792 )

Mann-Whitney U test not signif
Observations (x) in Hypertension Delta Female Combined lung weight $=12$ median $=-0.321799$ rank sum $=608$
Observations (y) in No Hypertension Delta Female Combined lung weight $=112$ median $=-0.043932$
$\mathrm{U}=530 \quad \mathrm{U}^{\prime}=814$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1172(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.8828$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.2345$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.605655(95 \% \mathrm{CI}: 0.43489$ to 0.7507$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.28581$ (CI: -0.78401 to 0.23871 )

## Mann-Whitney U test not signif

Observations (x) in DM Delta Female Combined lung weight $=10$ median $=0.073135$ rank sum $=705$
Observations (y) in No DM Delta Female Combined lung weight $=115$ median $=-0.102485$
$\mathrm{U}=650 \quad \mathrm{U}=500$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2513(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$

Upper side $\mathrm{P}=0.7487$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.5026$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.434783(95 \%$ CI: 0.272 to 0.615892$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.130185$ (CI: -0.35275 to 0.53443 )

Mann-Whitney U test- significant!
Observations ( x ) in SGA Delta Female Pancreas weight $=59$ median $=-0.465091$ rank sum $=3,914.5$
Observations (y) in Non SGA Delta Female Pancreas weight $=110$ median $=-0.028319$
$\mathrm{U}=2,144.5 \quad \mathrm{U}^{\prime}=4,345.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0002$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.669569(95 \%$ CI: 0.579409 to 0.746978$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.521015$ (CI: -0.82058 to -0.24264

Mann-Whitney U test AI vs UE - SIGNIFICANT
AI pancreas heavier
Observations (x) in COD AI Delta Female Pancreas weight $=64$ median $=0.018439$ rank sum $=$ 9,609.5
Observations (y) in COD UE Delta Female Pancreas weight $=180$ median $=-0.168846$
$\mathrm{U}=7,529.5 \quad \mathrm{U}^{\prime}=3,990.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9999(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0002$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.346398$ ( $95 \%$ CI: 0.27446 to 0.427858 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.31854$ (CI: 0.14773 to 0.50377 )

Mann-Whitney U test not signif
Observations (x) in COD UE Delta Female Pancreas weight $=180$ median $=-0.168846$ rank sum $=$ 17,741.5
Observations (y) in COD Placenta Delta Female Pancreas weight $=15$ median $=-0.351594$
$\mathrm{U}=1,451.5 \quad \mathrm{U}^{\prime}=1,248.5$
Normalised statistic $=0.483338$ (adjusted for ties)
Lower side $\mathrm{P}=0.6856$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.3144$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6289(\mathrm{H} 1$ : x tends to be distributed differently to y$)$
Theta $(\mathrm{U} / \mathrm{mn})=0.462407(95 \%$ CI: 0.321974 to 0.610296$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.085075$ (CI: -0.30046 to 0.44363 )

Mann-Whitney U test -not signif
Observations (x) in Overweight Delta Female Pancreas weight $=58$ median $=-0.150167$ rank sum $=$

## 2,695.5

Observations (y) in Obese Delta Female Pancreas weight $=36$ median $=-0.042537$
$\mathrm{U}=984.5 \quad \mathrm{U}^{\prime}=1,103.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3232(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6768$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6465$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.528496$ ( $95 \%$ CI: 0.410188 to 0.6431 )
95.1\% confidence interval for difference between medians or means:

Median difference $=-0.05875$ (CI: -0.27818 to 0.21034 )

Mann-Whitney U test
Observations (x) in Overweight Delta Female Pancreas weight $=58$ median $=-0.150167$ rank sum $=$ 3,070.5
Observations (y) in Normal Delta Female Pancreas weight $=48$ median $=-0.116253$
$\mathrm{U}=1,359.5 \quad \mathrm{U}^{\prime}=1,424.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4192$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.5808$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.8385$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.511674(95 \%$ CI: 0.40329 to 0.618758$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.01926$ (CI: -0.24965 to 0.21556 )

Mann-Whitney U test
Observations (x) in Normal Delta Female Pancreas weight $=48$ median $=-0.116253$ rank sum $=2,006$
Observations (y) in Obese Delta Female Pancreas weight $=36$ median $=-0.042537$
$\mathrm{U}=830 \quad \mathrm{U}^{\prime}=898$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3808$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.6192$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.7616$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.519676$ ( $95 \%$ CI: 0.397417 to 0.639188 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.044665$ (CI: -0.25401 to 0.27276 )

Mann-Whitney U test not signif
Observations (x) in Obese Delta Female Pancreas weight $=36$ median $=-0.042537$ rank sum $=756.5$
Observations ( y ) in underweight Delta Female Pancreas weight $=6$ median $=0.06459$
$\mathrm{U}=90.5 \quad \mathrm{U}^{\prime}=125.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2717$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7283$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.5434$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.581019$ ( $95 \%$ CI: 0.343689 to 0.78218 )
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=-0.14657$ (CI: -0.55538 to 0.29318 )

Mann-Whitney U test not signif
Observations (x) in Hypertension Delta Female Pancreas weight $=24$ median $=-0.125028$ rank sum $=$ 3,405
Observations (y) in No Hypertension Delta Female Pancreas weight $=282$ median $=-0.119266$

$$
\mathrm{U}=3,105 \quad \mathrm{U}^{\prime}=3,663
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2526$ (H1: x tends to be less than y)
Upper side $\mathrm{P}=0.7474$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.5052$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.541223(95 \%$ CI: 0.422493 to 0.654596$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.089(\mathrm{CI}:-0.38878$ to 0.16258$)$
Mann-Whitney U test not signif
Observations (x) in DM Delta Female Pancreas weight $=16$ median $=0.008992$ rank sum $=2,564.5$
Observations (y) in No DM Delta Female Pancreas weight $=291$ median $=-0.122041$
$\mathrm{U}=2,428.5 \quad \mathrm{U}^{\prime}=2,227.5$
Exact probability (adjusted for ties):
Lower side $P=0.3869$ (H1: x tends to be less than y)
Upper side $\mathrm{P}=0.6131$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.7739$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.478415(95 \% \mathrm{CI}: 0.341904$ to 0.618876$)$

95\% confidence interval for difference between medians or means:
Median difference $=0.065305$ (CI: -0.32895 to 0.44648 )

Mann-Whitney U test- significant!
Observations (x) in SGA Delta Female spleen weight $=80$ median $=-0.443789$ rank sum $=6,174.5$
Observations (y) in Non SGA Delta Female spleen weight $=136$ median $=0.15425$
$\mathrm{U}=2,934.5 \quad \mathrm{U}^{\prime}=7,945.5$
Normalised statistic $=-5.648632($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.730285(95 \%$ CI: 0.655138 to 0.792511$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.80475$ (CI: -1.08358 to -0.5187 )

## Mann-Whitney U test AI vs UE SIGNIFICANT

Observations ( x ) in COD AI Delta Female spleen weight $=71$ median $=0.03679$ rank sum $=12,545$
Observations (y) in COD UE Delta Female spleen weight $=227$ median $=-0.048525$
$\mathrm{U}=9,989 \quad \mathrm{U}^{\prime}=6,128$
Normalised statistic $=3.046392$ (adjusted for ties)
Lower side $\mathrm{P}=0.9988$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.0012$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0023$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.38022(95 \% \mathrm{CI}: 0.31009$ to 0.456934$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.1714$ (CI: 0.05684 to 0.37611 )

Mann-Whitney U test UE vs Placenta - SIGNIFICANT!
Observations (x) in COD UE Delta Female spleen weight $=227$ median $=-0.048525$ rank sum $=$ 29,108
Observations (y) in COD placenta Delta Female spleen weight $=19$ median $=-0.595127$
$\mathrm{U}=3,230 \quad \mathrm{U}^{\prime}=1,083$
Normalised statistic $=3.602943$ (adjusted for ties)
Lower side $\mathrm{P}=0.9998$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.0002$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.0003$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.251101(95 \%$ CI: 0.15787 to 0.381852$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.59978$ (CI: 0.25252 to 0.99483 )

## Mann-Whitney U test Not signif

Observations ( x ) in Overweight Delta Female spleen weight $=62$ median $=-0.046106$ rank sum $=$ 3,312.5
Observations (y) in Obese Delta Female spleen weight $=45$ median $=0.004359$
$\mathrm{U}=1,359.5 \quad \mathrm{U}^{\prime}=1,430.5$
Exact probability (adjusted for ties):

Lower side $\mathrm{P}=0.4124(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.5876$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.8247$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.512724$ ( $95 \%$ CI: 0.403919 to 0.620103 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.0132$ (CI: -0.13938 to 0.15646 )

## Mann-Whitney U test

Observations ( x ) in Overweight Delta Female spleen weight $=62$ median $=-0.046106$ rank sum $=$ 3,748.5
Observations (y) in Normal Delta Female spleen weight $=55$ median $=-0.062801$
$\mathrm{U}=1,795.5 \quad \mathrm{U}=1,614.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3117$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.6883$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.6233$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.47346(95 \% \mathrm{CI}: 0.37242$ to 0.577179$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.036605$ (CI: -0.10336 to 0.2064 )

## Mann-Whitney U test

Observations (x) in Normal Delta Female spleen weight $=55$ median $=-0.062801$ rank sum $=2,703$
Observations ( y ) in Obese Delta Female spleen weight $=45$ median $=0.004359$
$\mathrm{U}=1,163 \quad \mathrm{U}^{\prime}=1,312$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3042(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6958$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6084$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.530101(95 \%$ CI: 0.417695 to 0.638967$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.04308(\mathrm{CI}:-0.22994$ to 0.14615$)$

Mann-Whitney U test not signif
Observations (x) in Obese Delta Female spleen weight $=45$ median $=0.004359$ rank sum $=1,141.5$
Observations (y) in Underweight Delta Female spleen weight $=6$ median $=0.039662$
$\mathrm{U}=106.5 \quad \mathrm{U}^{\prime}=163.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2085$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7915$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.417$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.605556(95 \%$ CI: 0.367855 to 0.797334$)$
95.3\% confidence interval for difference between medians or means:

Median difference $=-0.17346$ (CI: -1.07653 to 0.16739 )

## Mann-Whitney U test - BP vs no BP - SIGNIFICANT!

Observations ( x ) in Hypertension Delta Female spleen weight $=31$ median $=-0.327009$ rank sum $=$

## 4,352.5

Observations (y) in No Hypertension Delta Female spleen weight $=346$ median $=-0.036444$
$\mathrm{U}=3,856.5 \quad \mathrm{U}^{\prime}=6,869.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0046$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9954$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0091$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.640453$ ( $95 \% \mathrm{CI}: 0.534548$ to 0.7322 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.350795$ (CI: -0.64331 to -0.10523 )

Mann-Whitney U test not signif
Observations ( x ) in DM Delta Female spleen weight $=26$ median $=-0.032553$ rank sum $=5,029.5$
Observations (y) in No DM Delta Female spleen weight $=352$ median $=-0.043434$
$\mathrm{U}=4,678.5 \quad \mathrm{U}^{\prime}=4,473.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.425$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.575$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.85$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.4888(95 \%$ CI: 0.37789 to 0.601051$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.01858$ (CI: -0.26452 to 0.30102 )

## Mann-Whitney U test OW vs Obese - not signif

Observations (x) in Overweight Delta Female Thymus weight $=67$ median $=-0.011791$ rank sum $=$ 4,097
Observations (y) in Obese Delta Female Thymus weight $=47$ median $=-0.041299$

## $\mathrm{U}=1,819 \quad \mathrm{U}^{\prime}=1,330$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0802$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9198(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.1603(\mathrm{H} 1$ : x tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.422356(95 \% \mathrm{CI}: 0.322667$ to 0.530239$)$
95.1\% confidence interval for difference between medians or means:

Median difference $=0.11956(\mathrm{CI}:-0.03763$ to 0.36219$)$
"Mann-Whitney U test
Observations (x) in OW Delta Female Thymus weight $=67$ median $=-0.011791$ rank sum $=4,476$
Observations (y) in Normal Delta Female Thymus weight $=55$ median $=-0.069681$
$\mathrm{U}=2,198 \quad \mathrm{U}^{\prime}=1,487$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0337$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9663$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0674$ (H1: x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.403528(95 \%$ CI: 0.309497 to 0.506885$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.14312(\mathrm{CI}:-0.01026$ to 0.38319$)$

## Mann-Whitney U test

Observations (x) in Normal Delta Female Thymus weight $=55$ median $=-0.069681$ rank sum $=2,788.5$
Observations (y) in Obese Delta Female Thymus weight $=47$ median $=-0.041299$
$\mathrm{U}=1,248.5 \quad \mathrm{U}^{\prime}=1,336.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.385(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.615(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.77$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.517021$ ( $95 \%$ CI: 0.406495 to 0.625588 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.02326$ (CI: -0.23033 to 0.18242 )
Mann-Whitney U test UW vs obese - not signif
Observations (x) in Obese Delta Female Thymus weight $=47$ median $=-0.041299$ rank sum $=1,295$
Observations (y) in Underweight Delta Female Thymus weight $=7$ median $=-0.084561$
$\mathrm{U}=167 \quad \mathrm{U}^{\prime}=162$
Exact probability:
Lower side $\mathrm{P}=0.4799$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.5201$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.9598$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.492401(95 \%$ CI: 0.287175 to 0.700617$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.02643$ (CI: -0.3982 to 0.45768 )

Mann-Whitney U test BP vs no BP - not signif
Observations (x) in Hypertension Delta Female Thymus weight $=32$ median $=-0.211463$ rank sum $=$ 5,427
Observations (y) in No Hypertension Delta Female Thymus weight $=353$ median $=-0.043143$
$\mathrm{U}=4,899 \quad \mathrm{U}^{\prime}=6,397$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1076$ (H1: x tends to be less than y)
Upper side $\mathrm{P}=0.8924$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.2152$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.566307(95 \% \mathrm{CI}: 0.462084$ to 0.663924$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.153465(\mathrm{CI}:-0.45652$ to 0.12008 )

Mann-Whitney U test DM vs no DM - not signif.
Observations (x) in DM Delta Female Thymus weight $=27$ median $=-0.145675$ rank sum $=4,688$
Observations (y) in No DM Delta Female Thymus weight $=359$ median $=-0.041299$
$\mathrm{U}=4,310 \quad \mathrm{U}^{\prime}=5,383$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1697$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8303$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.3394$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.555349(95 \% \mathrm{CI}: 0.443188$ to 0.661125$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.12278(\mathrm{CI}:-0.40795$ to 0.11371$)$

## Mann-Whitney U test SGA vs Non SGA - SIGNIFICANT!

Observations (x) in SGA Delta Female Thymus weight $=76$ median $=-0.630227$ rank sum $=5,130.5$
Observations (y) in Non SGA Delta Female Thymus weight $=141$ median $=0.125081$
$\mathrm{U}=2,204.5 \quad \mathrm{U}^{\prime}=8,511.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to $y$ )
Theta $(\mathrm{U} ' / \mathrm{mn})=0.79428(95 \% \mathrm{CI}: 0.72375$ to 0.848751$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-1.00172$ (CI: -1.30505 to -0.72859 )

## Mann-Whitney U test - AI vs UE - SIGNIFICANT!

Observations (x) in AI COD Delta Female Thymus weight $=72$ median $=0.035993$ rank sum $=12,670$
Observations (y) in UE COD Delta Female Thymus weight $=233$ median $=-0.043543$
$\mathrm{U}=10,042 \quad \mathrm{U}^{\prime}=6,734$
Normalised statistic $=2.528853$ (adjusted for ties)
Lower side $\mathrm{P}=0.9943$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.0057(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0114$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.401407$ ( $95 \% \mathrm{CI}: 0.330447$ to 0.477728 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.11959$ (CI: 0.02451 to 0.23959 )

## Mann-Whitney U test UE vs Placenta - SIGNIFICANT!

Observations (x) in UE COD Delta Female Thymus weight $=233$ median $=-0.043543$ rank sum $=$ 30,300.5
Observations (y) in Placenta COD Delta Female Thymus weight $=19$ median $=-0.553919$
$\mathrm{U}=3,039.5 \quad \mathrm{U}^{\prime}=1,387.5$

Normalised statistic $=2.703697$ (adjusted for ties)
Lower side $\mathrm{P}=0.9966$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.0034(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0069(\mathrm{H} 1$ : x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.313418(95 \% \mathrm{CI}: 0.207985$ to 0.447774$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.47687(\mathrm{CI}: 0.12452$ to 0.84408$)$

Mann-Whitney U test- significant!
Observations (x) in SGA Delta Female Thyroid weight $=14$ median $=-0.574747$ rank sum $=244$
Observations (y) in Non SGA Delta Female Thyroid weight $=42$ median $=-0.086259$
$\mathrm{U}=139 \quad \mathrm{U}^{\prime}=449$

Exact probability:
Lower side $\mathrm{P}=0.0014(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9986$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0027$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.763605(95 \%$ CI: 0.590995 to 0.873247$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.481225(\mathrm{CI}:-0.81294$ to -0.1744$)$

Mann-Whitney U test not signif
Observations (x) in COD AI Delta Female Thyroid weight $=6$ median $=-0.075033$ rank sum $=165$
Observations (y) in COD UE Delta Female Thyroid weight $=43$ median $=-0.11505$
$\mathrm{U}=144 \quad \mathrm{U}^{\prime}=114$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3319$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.6681(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.6639$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.44186(95 \% \mathrm{CI}: 0.236583$ to 0.672648$)$
$95.3 \%$ confidence interval for difference between medians or means:
Median difference $=0.114125(\mathrm{CI}:-0.37416$ to 0.65643$)$
Mann-Whitney U test Mac vs non mac - SIGNIFICANT!
Observations (x) in Macerated Delta Female Brain weight $=264$ median $=-0.147302$ rank sum $=$ 42,842
Observations (y) in Non macerated Delta Female Brain weight $=108$ median $=0.370243$

$$
U=7,862 \quad U '=20,650
$$

Normalised statistic $=-6.79196($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.724256$ ( $95 \%$ CI: 0.663853 to 0.776281 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.52287(\mathrm{CI}:-0.65466$ to -0.38524$)$

Mann-Whitney U test mac vs non mac - SIGNIFICANT!
Observations (x) in Macerated Delta Female Liver weight $=280$ median $=-0.229789$ rank sum $=$ 46,908.5
Observations (y) in Non macerated Delta Female Liver weight $=116$ median $=0.19691$
$\mathrm{U}=7,568.5 \quad \mathrm{U}^{\prime}=24,911.5$

Normalised statistic $=-8.365302$ (adjusted for ties)
Lower side P < 0.0001 (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.76698(95 \%$ CI: 0.711448 to 0.813453$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.58066$ (CI: -0.74022 to -0.44799 )
Mann-Whitney U test Mac vs non Mac - SIGNIFICANT!
Observations (x) in Macerated Delta Female Thymus weight $=275$ median $=-0.094157$ rank sum $=$

47,697
Observations (y) in Non macerated Delta Female Thymus weight $=111$ median $=0.085735$
$\mathrm{U}=9,747$
$\mathrm{U}^{\prime}=20,778$
Normalised statistic $=-5.558961($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.680688(95 \%$ CI: 0.61921 to 0.735461$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.26446$ (CI: -0.3982 to -0.15951 )

## Mann-Whitney U test- SIGNIFICANT!

Macerated lighter
Observations ( x ) in Mace ratedDelta Female combined adrenal weight $=279$ median $=-0.237005$ rank sum $=48,480$
Observations (y) in Non Macertaed Delta Female combined adrenal weight $=115$ median $=0.258435$
$\mathrm{U}=9,420 \quad \mathrm{U}^{\prime}=22,665$
Normalised statistic $=-6.444125($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.706405$ ( $95 \%$ CI: 0.646981 to 0.758485 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.5329$ (CI: -0.68894 to -0.37746 )

Mann-Whitney U test- significant!
Mac heart lighter
Observations (x) in Mac Delta Female Heart Weight $=283$ median $=-0.165992$ rank sum $=49,280$
Observations (y) in Non Mac Delta Female Heart Weight $=115$ median $=0.265336$
$\mathrm{U}=9,094 \quad \mathrm{U}^{\prime}=23,451$
Normalised statistic $=-6.900751$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.720572(95 \%$ CI: 0.662002 to 0.771389$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.46401$ (CI: -0.58699 to -0.34379 )

## Mann-Whitney U test SOGNIFICANT!

Mac lighter
Observations (x) in Mac Delta Female Combined Kidney weight $=109$ median $=-0.222355$ rank sum $=7,224.5$
Observations (y) in Non Mac Delta Female Combined Kidney weight $=50$ median $=0.22309$
$\mathrm{U}=1,229.5 \quad \mathrm{U}^{\prime}=4,220.5$
Normalised statistic $=-5.547795($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.774404(95 \%$ CI: 0.685788 to 0.841339$)$
$95 \%$ confidence interval for difference between medians or means:

Median difference $=-0.56456($ CI: -0.76703 to -0.3707$)$

## Mann-Whitney U test- SIGNIFICANT!

Mac lighter
Observations ( x ) in Mac Delta Female Combined lung weight $=86$ median $=-0.236588$ rank sum $=$ 4,490
Observations (y) in Non Mac Delta Female Combined lung weight $=37$ median $=0.372205$
$\mathrm{U}=749 \quad \mathrm{U}^{\prime}=2,433$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.764613(95 \%$ CI: 0.65999 to 0.84168$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.675965$ (CI: -0.97324 to -0.41908 )
Mann-Whitney U test SIGNIFICANT!
Mac lighter
Observations (x) in Mac Delta Female Pancreas weight $=213$ median $=-0.210185$ rank sum $=30,200.5$
Observations (y) in Non Mac Delta Female Pancreas weight $=96$ median $=-0.014669$
$\mathrm{U}=7,409.5 \quad \mathrm{U}^{\prime}=13,038.5$
Normalised statistic $=-3.872481$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.637642(95 \%$ CI: 0.568784 to 0.700313$)$
$95 \%$ confidence interval for difference between medians or means
Median difference $=-0.29729(\mathrm{CI}:-0.4511$ to -0.14845$)$

## Mann-Whitney U test SIGNIFICANT!

Mac lighter
Observations (x) in M acDelta Female spleen weight $=262$ median $=-0.124109$ rank sum $=44,472.5$
Observations (y) in Non Mac Delta Female spleen weight $=116$ median $=0.039413$
$\mathrm{U}=10,019.5 \quad \mathrm{U}^{\prime}=20,372.5$
Normalised statistic $=-5.283596$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $P>0.9999$ (H1: $x$ tends to be greater than $y$ )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.670324(95 \%$ CI: 0.608987 to 0.725414$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.30755(\mathrm{CI}:-0.47971$ to -0.1753$)$

## Mann-Whitney U test- SIGNIFICANT

Mac lighter
Observations (x) in Mac Delta Female Thyroid weight $=56$ median $=-0.292981$ rank sum $=1,767$
Observations (y) in Non Mac Delta Female Thyroid weight $=12$ median $=0.157634$
$\mathrm{U}=171$
$\mathrm{U}^{\prime}=501$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0035$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9965$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0069$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.745536(95 \% \mathrm{CI}: 0.566166$ to 0.862688$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.499985(\mathrm{CI}:-0.90954$ to -0.1391$)$

## Males:

Mann-Whitney U test not signif
Observations ( x ) in Overweight Delta Male combined Adrenal weight $=28$ median $=0.42937$ rank sum = 1,150
Observations (y) in Obese Delta Male combined Adrenal weight $=42$ median $=-0.058551$
$\mathrm{U}=744 \quad \mathrm{U}^{\prime}=432$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0308$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9692(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0616$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.367347(95 \% \mathrm{CI}: 0.250246$ to 0.506355$)$

95\% confidence interval for difference between medians or means:
Median difference $=0.555495(\mathrm{CI}:-0.03986$ to 1.14704$)$
Mann-Whitney U test
Observations ( x ) in Overweight Delta Male combined Adrenal weight $=28$ median $=0.42937$ rank sum = $1,028.5$
Observations (y) in Normal Delta Male combined Adrenal weight $=35$ median $=-0.045902$
$\mathrm{U}=622.5 \quad \mathrm{U}^{\prime}=357.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0336(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9664$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0671$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.364796$ ( $95 \%$ CI: 0.244167 to 0.509354 )
95\% confidence interval for difference between medians or means:
Median difference $=0.45256$ (CI: -0.05463 to 0.8824 )

Mann-Whitney U test
Observations (x) in Normal Delta Male combined Adrenal weight $=35$ median $=-0.045902$ rank sum $=$ 1,404.5
Observations (y) in Obese Delta Male combined Adrenal weight $=42$ median $=-0.058551$
$\mathrm{U}=774.5 \quad \mathrm{U}^{\prime}=695.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3448(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6552$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.6897$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.473129(95 \%$ CI: 0.350014 to 0.600261$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.11731$ (CI: -0.43501 to 0.69942 )
Mann-Whitney U test not signif
Observations ( x ) in Obese Delta Male combined Adrenal weight $=42$ median $=-0.058551$ rank sum $=$

## 1,100

Observations (y) in Underweight Delta Male combined Adrenal weight $=9$ median $=-0.356813$

$$
\mathrm{U}=197 \quad \mathrm{U}^{\prime}=181
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4263(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.5737$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.8525$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mnn})=0.478836$ ( $95 \%$ CI: 0.291643 to 0.673177 )
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=0.051595$ (CI: -0.8332 to 0.89855 )
Mann-Whitney U test- significant!
Observations ( x ) in SGA Delta Male combined Adrenal weight $=99$ median $=-0.620872$ rank sum $=$ 8,170.5
Observations (y) in Non SGA Delta Male combined Adrenal weight $=153$ median $=0.384822$
$\mathrm{U}=3,220.5 \quad \mathrm{U}^{\prime}=11,926.5$
Normalised statistic $=-7.702937$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.787384(95 \%$ CI: 0.723453 to 0.838297$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.97399(\mathrm{CI}:-1.21408$ to -0.75092$)$

Mann-Whitney U test Mac vs Non Mac - significant!
Macerated smaller adrenals
Observations (x) in Macerated Delta Male combined Adrenal weight $=205$ median $=-0.214898$ rank sum $=24,621.5$
Observations (y) in Non Macerated Delta Male combined Adrenal weight $=46$ median $=0.429215$
$\mathrm{U}=3,506.5 \quad \mathrm{U}^{\prime}=5,923.5$
Normalised statistic $=-2.7157$ (adjusted for ties)
Lower side $\mathrm{P}=0.0033$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9967(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0066$ (H1: x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.628155(95 \% \mathrm{CI}: 0.535955$ to 0.71038$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.49879(\mathrm{CI}:-0.8334$ to -0.144$)$

## Mann-Whitney U test not signif

Observations (x) in Hypertension Delta Male combined Adrenal weight $=26$ median $=-0.178382$ rank sum $=3,057$
Observations (y) in No Hypertension Delta Male combined Adrenal weight $=225$ median $=-0.136815$ $\mathrm{U}=2,706 \quad \mathrm{U}^{\prime}=3,144$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2673$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7327$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.5347$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.537436(95 \%$ CI: 0.421765 to 0.648468$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.139795(\mathrm{CI}:-0.59594$ to 0.29106 )

Mann-Whitney U test DM vs No DM - Significant!
DM have heavier adrenals
Observations (x) in DM Delta Male combined Adrenal weight $=15$ median $=0.152678$ rank sum $=$ 2,496
Observations (y) in No DM Delta Male combined Adrenal weight $=237$ median $=-0.178754$
$\mathrm{U}=2,376 \quad \mathrm{U}=1,179$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0139$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9861(\mathrm{H}: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0279$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.331646(95 \%$ CI: 0.212823 to 0.48247$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.50511$ (CI: 0.04496 to 0.96234 )

## Mann-Whitney U test - UE vs placenta SIGNIFICANT!

COD placenta have smaller adrenals than UE
Observations ( x ) in COD UE Delta Male combined Adrenal weight $=154$ median $=-0.015904$ rank sum $=15,219$
Observations (y) in COD placenta Delta Male combined Adrenal weight $=30$ median $=-0.74802$

```
U =3,284 U'=1,336
```

Normalised statistic $=3.649586$ (adjusted for ties)
Lower side $\mathrm{P}=0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )

Upper side $\mathrm{P}=0.0001(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0003(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.289177(95 \% \mathrm{CI}: 0.202014$ to 0.399599$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.64852(\mathrm{CI}: 0.30939$ to 0.98154$)$

## Mann-Whitney U test UE vs AI - SIGNIFICANT!

UE smaller adrenals than AI
Observations (x) in COD AI Delta Male combined Adrenal weight $=21$ median $=0.586726$ rank sum = 2,346.5
Observations (y) in COD UE Delta Male combined Adrenal weight $=154$ median $=-0.015904$
$\mathrm{U}=2,115.5 \quad \mathrm{U}^{\prime}=1,118.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0107$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9893(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.0214(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.345857(95 \% \mathrm{CI}: 0.237132$ to 0.477687$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.56649(\mathrm{CI}: 0.0906$ to 1.02011$)$

Mann-Whitney U test- Overweight vs Obese - not signif
Observations (x) in Overweight Delta Male Brain weight $=27$ median $=0.04204$ rank sum $=929$
Observations (y) in Obese Delta Male Brain weight $=39$ median $=-0.118765$

$$
\mathrm{U}=551 \quad \mathrm{U}^{\prime}=502
$$

Exact probability:
Lower side $\mathrm{P}=0.378$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.622$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.7559$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.476733$ ( $95 \%$ CI: 0.342707 to 0.614851 )
95\% confidence interval for difference between medians or means:
Median difference $=0.09793$ (CI: -0.36834 to 0.56321)

Observations (x) in OW Delta Male Brain weight $=27$ median $=0.04204$ rank sum $=812$
Observations (y) in Normal Delta Male Brain weight $=34$ median $=0.315838$
$\mathrm{U}=434 \quad \mathrm{U}^{\prime}=484$
Exact probability:
Lower side $\mathrm{P}=0.362$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.638$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.724$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.527233(95 \%$ CI: 0.384948 to 0.664472$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.07288$ (CI: -0.56471 to 0.39073 )
Mann-Whitney U test
Observations ( x ) in Normal Delta Male Brain weight $=34$ median $=0.315838$ rank sum $=1,324$
Observations ( y ) in Obese Delta Male Brain weight $=39$ median $=-0.118765$

## $\mathrm{U}=729$ <br> $\mathrm{U}^{\prime}=597$

Exact probability:
Lower side $\mathrm{P}=0.2356$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7644$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.4712$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.450226$ ( $95 \%$ CI: 0.326511 to 0.581712 )
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.192455$ (CI: -0.33868 to 0.65432 )

Mann-Whitney U test - BP vs no BP - not signif
Observations (x) in Hypertension Delta Male Brain weight $=24$ median $=-0.055009$ rank sum $=3,122$
Observations ( y ) in No hypertension Delta Male Brain weight $=222$ median $=-0.026093$
$\mathrm{U}=2,822 \quad \mathrm{U}^{\prime}=2,506$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.318$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.682(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.6359$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.470345(95 \%$ CI: 0.354863 to 0.589761$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.102155(\mathrm{CI}:-0.30545$ to 0.5186 )

Mann-Whitney U test - DM vs no DM - No signif

Observations ( x ) in DM Delta Male Brain weight $=17$ median $=0.211132$ rank sum $=2,457$
Observations ( y ) in No DM Delta Male Brain weight $=231$ median $=-0.041591$
$\mathrm{U}=2,304 \quad \mathrm{U}^{\prime}=1,623$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1178(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.8822(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.2357$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.413293$ ( $95 \%$ CI: 0.287038 to 0.554721 )
95\% confidence interval for difference between medians or means:
Median difference $=0.25918$ (CI: -0.16843 to 0.68579)

Mann-Whitney U test- significant!
Observations ( x ) in SGA Delta Male Brain weight $=94$ median $=-0.522619$ rank sum $=8,016$
Observations (y) in Non SGA Delta Male Brain weight $=158$ median $=0.308405$
$\mathrm{U}=3,551 \quad \mathrm{U}^{\prime}=11,301$
Normalised statistic $=-6.924844($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.760908$ ( $95 \%$ CI: 0.694001 to 0.815511 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.847475$ (CI: -1.07173 to -0.63514 )

Mann-Whitney U test AI vs UE - not signif
Observations (x) in AI Delta Male Brain weight $=21$ median $=0.243145$ rank sum $=2,049$
Observations ( y ) in UE Delta Male Brain weight $=155$ median $=0.105088$
$\mathrm{U}=1,818 \quad \mathrm{U}^{\prime}=1,437$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.194$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.806(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.3879(\mathrm{H} 1$ : x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.441475(95 \% \mathrm{CI}: 0.320146$ to 0.571752$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.16139(\mathrm{CI}:-0.18363$ to 0.48329$)$

Mann-Whitney U test - UE vs Placenta - SIGNIFICANT!!
Observations (x) in UE Delta Male Brain weight $=155$ median $=0.105088$ rank sum $=15,439$
Observations ( y ) in Placenta Delta Male Brain weight $=29$ median $=-0.744089$
$\mathrm{U}=3,349 \quad \mathrm{U}^{\prime}=1,146$

Normalised statistic $=4.184321$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y)
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.25495(95 \%$ CI: 0.172581 to 0.364543$)$
$95 \%$ confidence interval for difference between medians or means:

Median difference $=0.83034$ (CI: 0.47391 to 1.18526 )
Mann-Whitney U test- Mac vs non mac - SIGNIFICANT!
Observations (x) in Macerated Delta Male Brain weight $=206$ median $=-0.137634$ rank sum $=$ 24,141.5
Observations (y) in Non Macerated Delta Male Brain weight $=41$ median $=0.388433$
$\mathrm{U}=2,820.5 \quad \mathrm{U}^{\prime}=5,625.5$
Normalised statistic $=-3.356931($ adjusted for ties $)$
Lower side $\mathrm{P}=0.0004$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9996$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0008$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.666055(95 \%$ CI: 0.570274 to 0.747885$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.534965$ (CI: -0.82958 to -0.24123 )

Mann-Whitney U test UE vs Placenta - significant
Placenta COD have lighter kidneys than UE
Observations ( x ) in COD UE Delta male combined kidney weight $=56$ median $=0.213252$ rank sum $=$ 2,206
Observations (y) in COD Placenta Delta male combined kidney weight $=13$ median $=-0.884312$
$\mathrm{U}=610 \quad \mathrm{U}^{\prime}=118$

Exact probability:
Lower side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}>0.9999(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.162088(95 \% \mathrm{CI}: 0.076761$ to 0.324113$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=1.037785$ (CI: 0.59994 to 1.71626 )

Mann-Whitney U test AI vs UE not signif
Observations (x) in COD AI Delta male combined kidney weight $=8$ median $=0.600033$ rank sum $=$ 269
Observations (y) in COD UE Delta male combined kidney weight $=56$ median $=0.213252$
$\mathrm{U}=233 \quad \mathrm{U}^{\prime}=215$

Exact probability:
Lower side $\mathrm{P}=0.4328$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.5672(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.8656$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.479911(95 \% \mathrm{CI}: 0.288454$ to 0.678455$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.103065(\mathrm{CI}:-0.82889$ to 0.95323 )

Mann-Whitney U test SGA vs No SGA - significant!
SGA kidneys lighter
Observations (x) in SGA Delta male combined kidney weight $=42$ median $=-0.443889$ rank sum $=$ 1,342
Observations (y) in Non SGA Delta male combined kidney weight $=53$ median $=0.619412$
$\mathrm{U}=439 \quad \mathrm{U}^{\prime}=1,787$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ ( H 1 : x tends to be distributed differently to y )

Theta $(\mathrm{U} ' / \mathrm{mn})=0.802785(95 \% \mathrm{CI}: 0.696596$ to 0.875242$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-1.037385(\mathrm{CI}:-1.4824$ to -0.72745 )

Mann-Whitney U test mac vs no mac - not signif
Observations (x) in Macerated Delta male combined kidney weight $=72$ median $=-0.26661$ rank sum $=3,115.5$
Observations (y) in Non Macerated Delta male combined kidney weight $=19$ median $=0.419309$
$\mathrm{U}=487.5 \quad \mathrm{U}^{\prime}=880.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0274$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9726(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0547$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.64364(95 \%$ CI: 0.496917 to 0.764275$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.56449(\mathrm{CI}:-1.13366$ to 0.01103$)$

Mann-Whitney U test- significant!
Observations (x) in SGA Delta male combined kidney weight $=39$ median $=-0.548555$ rank sum $=$

1,130.5
Observations (y) in Non SGA Delta male combined kidney weight $=53$ median $=0.619412$
$\mathrm{U}=350.5 \quad \mathrm{U}=1,716.5$
Exact probability (adjusted for ties):
Lower side P < 0.0001 (H1: x tends to be less than y )
Upper side $P>0.9999$ (H1: $x$ tends to be greater than $y$ )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.830431(95 \%$ CI: 0.72578 to 0.897652$)$
95\% confidence interval for difference between medians or means:
Median difference $=-1.13325(\mathrm{CI}:-1.55607$ to -0.82276 )

Mann-Whitney U test BP vs no BP not signif
Observations ( x ) in Hypertension Delta male combined kidney weight $=11$ median $=-0.272127$ rank sum $=468.5$
Observations (y) in No Hypertension Delta male combined kidney weight $=81$ median $=-0.108915$
$\mathrm{U}=402.5 \quad \mathrm{U}^{\prime}=488.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3052(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6948$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6104$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.54826$ ( $95 \%$ CI: 0.372733 to 0.710758 )
95.1\% confidence interval for difference between medians or means:

Median difference $=-0.16428$ (CI: -0.89242 to 0.50501 )

## Mann-Whitney U test DM vs no DM not signif

Observations (x) in DM Delta male combined kidney weight $=3$ median $=1.375557$ rank sum $=208.5$
Observations (y) in No DM Delta male combined kidney weight $=89$ median $=-0.112607$
$\mathrm{U}=202.5 \quad \mathrm{U}^{\prime}=64.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.068$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.932$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.1361$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.241573(95 \%$ CI: 0.078025 to 0.57135$)$
confidence interval not calculated if n 1 or $\mathrm{n} 2<4$

Mann-Whitney U test not signif

Observations (x) in Normal Delta male combined kidney weight $=16$ median $=-0.355366$ rank sum $=$ 227
Observations (y) in Overweight Delta male combined kidney weight $=13$ median $=-0.108915$
$\mathrm{U}=91 \quad \mathrm{U}^{\prime}=117$

Exact probability:
Lower side $\mathrm{P}=0.2945$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7055(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.589$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.5625(95 \% \mathrm{CI}: 0.358136$ to 0.745104$)$
$95 \%$ confidence interval for difference between medians or means:

Median difference $=-0.2058(\mathrm{CI}:-0.80691$ to 0.65528$)$

## Mann-Whitney U test not signif

Observations ( x ) in Overweight Delta male combined kidney weight $=13$ median $=-0.108915$ rank sum $=212$
Observations (y) in Obese Delta male combined kidney weight $=15$ median $=-0.405046$

$$
\mathrm{U}=121 \quad \mathrm{U}^{\prime}=74
$$

Exact probability:
Lower side $\mathrm{P}=0.1472(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.8528$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.2945$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.379487(95 \%$ CI: 0.208547 to 0.593117$)$
95.4\% confidence interval for difference between medians or means:

Median difference $=0.41527$ (CI: -0.41953 to 1.19765)

Mann-Whitney U test not signif
Observations (x) in Obese Delta male combined kidney weight $=15$ median $=-0.405046$ rank sum $=$ 222
Observations (y) in Normal Delta male combined kidney weight $=16$ median $=-0.355366$
$\mathrm{U}=102 \quad \mathrm{U}=138$
Exact probability:
Lower side $\mathrm{P}=0.2473$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7527$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.4945$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.575(95 \% \mathrm{CI}: 0.376096$ to 0.74939$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.231545(\mathrm{CI}:-1.07055$ to 0.45024$)$

Mann-Whitney U test

Observations (x) in OW Delta Male liver weight $=28$ median $=0.251838$ rank sum $=969$
Observations (y) in Normal Delta Male liver weight $=36$ median $=-0.114175$
$\mathrm{U}=563 \quad \mathrm{U}^{\prime}=445$
Exact probability:
Lower side $\mathrm{P}=0.2156$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7844(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.4312$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.441468(95 \% \mathrm{CI}: 0.310574$ to 0.58275$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=0.176145(\mathrm{CI}:-0.28492$ to 0.70849$)$

Mann-Whitney U test OW vs obese - not signif
Observations ( x ) in Overweight Delta Male liver weight $=28$ median $=0.251838$ rank sum $=1,102$
Observations (y) in Obese Delta Male liver weight $=44$ median $=-0.360678$
$\mathrm{U}=696 \quad \mathrm{U}^{\prime}=536$

Exact probability:
Lower side $\mathrm{P}=0.1804$ (H1: x tends to be less than y )

Upper side $\mathrm{P}=0.8196(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.3608$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.435065(95 \% \mathrm{CI}: 0.309716$ to 0.571096$)$
$95 \%$ confidence interval for difference between medians or means
Median difference $=0.305035(\mathrm{CI}:-0.29965$ to 0.91391$)$
Mann-Whitney U test

Observations ( x ) in Normal Delta Male liver weight $=36$ median $=-0.114175$ rank sum $=1,515$
Observations (y) in Obese Delta Male liver weight $=44$ median $=-0.360678$
$\mathrm{U}=849 \quad \mathrm{U}^{\prime}=735$

Exact probability:
Lower side $\mathrm{P}=0.2934$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7066(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.5867(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.464015(95 \% \mathrm{CI}: 0.343767$ to 0.589462$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.1369(\mathrm{CI}:-0.33098$ to 0.59722$)$

Mann-Whitney U test - UW vs obese - not signif

Observations (x) in Obese Delta Male liver weight $=44$ median $=-0.360678$ rank sum $=1,187$
Observations (y) in Underweight Delta Male liver weight $=9$ median $=-0.257219$
$\mathrm{U}=197 \quad \mathrm{U}^{\prime}=199$

Exact probability:

Lower side $\mathrm{P}=0.4954(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.5046$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.9907$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.502525$ ( $95 \%$ CI: 0.311887 to 0.692316 )
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.01118$ (CI: -0.67584 to 0.87492 )

Mann-Whitney U test- BP vs np BP not signif
Observations (x) in Hypertension Delta Male liver weight $=26$ median $=-0.226221$ rank sum $=3,293.5$
Observations (y) in No Hypertension Delta Male liver weight $=231$ median $=-0.230568$
$\mathrm{U}=2,942.5 \quad \mathrm{U}^{\prime}=3,063.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4337$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.5663$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.8675$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.510073(95 \%$ CI: 0.395925 to 0.622975$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.034835$ (CI: -0.42563 to 0.32673 )
Mann-Whitney U test- DM vs no DM not signif
Observations ( x ) in DM Delta Male liver weight $=16$ median $=0.383175$ rank sum $=2,583.5$
Observations (y) in No DM Delta Male liver weight $=242$ median $=-0.249047$
$\mathrm{U}=2,447.5 \quad \mathrm{U}^{\prime}=1,424.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0384$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9616$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0768(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$
Theta $(\mathrm{U} / \mathrm{mn})=0.367898$ ( $95 \%$ CI: 0.245655 to 0.514158 )

95\% confidence interval for difference between medians or means:
Median difference $=0.55513$ (CI: -0.05712 to 1.13528)
Mann-Whitney U test- significant!
Observations (x) in SGA Delta Male liver weight $=100$ median $=-0.596779$ rank sum $=8,671$
Observations (y) in Non SGA Delta Male liver weight $=162$ median $=0.195342$
$\mathrm{U}=3,621 \quad \mathrm{U}^{\prime}=12,579$
Normalised statistic $=-7.516864($ adjusted for ties $)$
Lower side P < 0.0001 (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.776481(95 \%$ CI: 0.712566 to 0.828106$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.902745$ (CI: -1.14799 to -0.66763 )
Mann-Whitney U test- AI vs UE - SIGNIFICANT!
Observations ( x ) in AI Delta Male liver weight $=21$ median $=0.589701$ rank sum $=2,568$
Observations ( y ) in UE Delta Male liver weight $=160$ median $=-0.171968$
$\mathrm{U}=2,337 \quad \mathrm{U}^{\prime}=1,023$

Exact probability:
Lower side $\mathrm{P}=0.0016$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9984$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0032$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.304464(95 \%$ CI: 0.202894 to 0.434777$)$
95.1\% confidence interval for difference between medians or means:

Median difference $=0.71866$ (CI: 0.23435 to 1.1939)
Mann-Whitney U test UE vs Placenta - SIGNIFICANT!
Observations ( x ) in UE Delta Male liver weight $=160$ median $=-0.171968$ rank sum $=16,330$
Observations (y) in Placenta Delta Male liver weight $=29$ median $=-0.738443$
$\mathrm{U}=3,450 \quad \mathrm{U}^{\prime}=1,190$
Exact probability:
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.256466$ ( $95 \%$ CI: 0.174 to 0.365884 )
95\% confidence interval for difference between medians or means:
Median difference $=0.661225$ (CI: 0.34839 to 1.01854)
Mann-Whitney U test mac vs non mac - SIGNIFICANT!!
Observations (x) in Macerated Delta Male liver weight $=209$ median $=-0.394742$ rank sum $=23,865$
Observations ( y ) in Non Macerated Delta Male liver weight $=48$ median $=0.730075$
$\mathrm{U}=1,920 \quad \mathrm{U}^{\prime}=8,112$

Normalised statistic $=-6.666351($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.808612(95 \%$ CI: 0.729986 to 0.866359$)$
95\% confidence interval for difference between medians or means:
Median difference $=-1.17368$ (CI: -1.52276 to -0.87376 )

Mann-Whitney U test not signif
Observations (x) in Overweight Delta Male Combined Lung weight $=8$ median $=0.117854$ rank sum $=$ 81
Observations (y) in Obese Delta Male Combined Lung weight $=9$ median $=-0.615264$
$\mathrm{U}=45 \quad \mathrm{U}^{\prime}=27$

## Exact probability:

Lower side $\mathrm{P}=0.2117(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.7883$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.4234$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.375(95 \%$ CI: 0.171093 to 0.643835$)$
$95.4 \%$ confidence interval for difference between medians or means:
Median difference $=0.43327$ (CI: -1.00187 to 1.59761 )

Mann-Whitney U test not signif

Observations (x) in Normal Delta Male Combined Lung weight $=12$ median $=-0.242466$ rank sum $=$ 125
Observations (y) in Overweight Delta Male Combined Lung weight $=8$ median $=0.117854$
$\mathrm{U}=47 \quad \mathrm{U}^{\prime}=49$
Exact probability:
Lower side $\mathrm{P}=0.485$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.515$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.9699$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.510417$ ( $95 \% \mathrm{CI}: 0.277924$ to 0.737947 )
$95.3 \%$ confidence interval for difference between medians or means:
Median difference $=-0.05914$ (CI: -1.06206 to 1.45268 )

Mann-Whitney U test not signif
Observations (x) in Normal Delta Male Combined Lung weight $=12$ median $=-0.242466$ rank sum $=$ 145
Observations (y) in Obese Delta Male Combined Lung weight $=9$ median $=-0.615264$
$\mathrm{U}=67 \quad \mathrm{U}$ ' $=41$
Exact probability:
Lower side $\mathrm{P}=0.1912$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8088(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.3824$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.37963(95 \%$ CI: 0.188024 to 0.625334$)$
$95.1 \%$ confidence interval for difference between medians or means:

Median difference $=0.436445$ (CI: -0.689 to 2.04233)

## Mann-Whitney U test not signif

Observations (x) in Hypertension Delta Male Combined Lung weight $=9$ median $=-0.328659$ rank sum $=321$
Observations (y) in No Hypertension Delta Male Combined Lung weight $=65$ median $=-0.315802$ $\mathrm{U}=276 \quad \mathrm{U}=309$

Exact probability:
Lower side $\mathrm{P}=0.3974(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6026$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.7947$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.528205(95 \%$ CI: 0.338628 to 0.708764$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.15596$ (CI: -0.88229 to 0.67075 )

Mann-Whitney U test not signif. Number too small.
Observations ( x ) in DM Delta Male Combined Lung weight $=3$ median $=0.059094$ rank sum $=124$
Observations ( y ) in No DM Delta Male Combined Lung weight $=70$ median $=-0.322231$
$\mathrm{U}=118 \quad \mathrm{U}^{\prime}=92$
Exact probability:
Lower side $\mathrm{P}=0.3715(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6285$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.743$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.438095(95 \% \mathrm{CI}: 0.187553$ to 0.729533$)$
confidence interval not calculated if n 1 or $\mathrm{n} 2<4$

Mann-Whitney U test- significant!
Observations (x) in SGA Delta Male Combined Lung weight $=34$ median $=-0.671579$ rank sum $=885$
Observations (y) in Non SGA Delta Male Combined Lung weight $=41$ median $=0.360341$
$\mathrm{U}=290$

$$
\mathrm{U}^{\prime}=1,104
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.791966(95 \% \mathrm{CI}: 0.669199$ to 0.873904$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-1.103295(\mathrm{CI}:-1.60737$ to -0.61546$)$

## Mann-Whitney U test UE vs Placenta - SIGNIFICANT!

Placenta COD lungs lighter
Observations (x) in COD UE Delta Male Combined Lung weight $=43$ median $=-0.104404$ rank sum $=$ 1,305
Observations (y) in COD Placenta Delta Male Combined Lung weight $=10$ median $=-0.898292$
$\mathrm{U}=359 \quad \mathrm{U}^{\prime}=71$
Exact probability:
Lower side $\mathrm{P}=0.0003(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$

Upper side $\mathrm{P}=0.9997$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0006$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.165116$ ( $95 \%$ CI: 0.071116 to 0.355334 )
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=0.93111$ (CI: 0.38415 to 1.59828 )

Mann-Whitney U test AI vs UE - not signif
Observations (x) in COD AI Delta Male Combined Lung weight $=8$ median $=0.383541$ rank sum $=$ 234
Observations (y) in COD UE Delta Male Combined Lung weight $=43$ median $=-0.104404$
$\mathrm{U}=198 \quad \mathrm{U}^{\prime}=146$
Exact probability:
Lower side $\mathrm{P}=0.2581$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7419$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.5161$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.424419(95 \%$ CI: 0.241601 to 0.634643$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.320955$ (CI: -0.92306 to 1.03681 )

Mann-Whitney U test Mac vs no Mac - SIGNIFICANT!
Mac lungs lighter
Observations ( x ) in Macerated Delta Male Combined Lung weight $=55$ median $=-0.442166$ rank sum = 1,810
Observations (y) in No maceration Delta Male Combined Lung weight $=17$ median $=0.488464$

$$
\mathrm{U}=270 \quad \mathrm{U}^{\prime}=665
$$

Exact probability:
Lower side $\mathrm{P}=0.0041(\mathrm{H} 1$ : x tends to be less than y$)$
Upper side $\mathrm{P}=0.9959(\mathrm{H}: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0081$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.71123(95 \%$ CI: 0.554268 to 0.825428$)$
95.1\% confidence interval for difference between medians or means:

Median difference $=-0.91325(\mathrm{CI}:-1.53991$ to -0.34834$)$

Mann-Whitney U test obs vs OW not signif
Observations (x) in Overweight Delta Male pancreas weight $=27$ median $=0.240314$ rank sum $=924.5$
Observations (y) in Obese Delta Male pancreas weight $=38$ median $=0.327697$
$\mathrm{U}=546.5 \quad \mathrm{U}^{\prime}=479.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3301(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6699$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6602$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.467349(95 \% \mathrm{CI}: 0.333642$ to 0.606851$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.237375$ (CI: -1.06097 to 1.65486 )

Mann-Whitney U test

Observations ( x ) in Overweight Delta Male pancreas weight $=27$ median $=0.240314$ rank sum $=811$
Observations (y) in Normal Delta Male pancreas weight $=29$ median $=0.087264$
$\mathrm{U}=433 \quad \mathrm{U}^{\prime}=350$

Exact probability:
Lower side $\mathrm{P}=0.2522$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7478(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.5044$ ( H 1 : x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.446999(95 \% \mathrm{CI}: 0.308251$ to 0.596214$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.47056(\mathrm{CI}:-0.95847$ to 2.11519$)$

Mann-Whitney U test

Observations (x) in Normal Delta Male pancreas weight $=29$ median $=0.087264$ rank sum $=966.5$
Observations (y) in Obese Delta Male pancreas weight $=38$ median $=0.327697$
$\mathrm{U}=531.5 \quad \mathrm{U}^{\prime}=570.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4044$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.5956$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.8088$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.517695(95 \% \mathrm{CI}: 0.381939$ to 0.650423$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.26711(\mathrm{CI}:-1.81849$ to 1.31777 )
Mann-Whitney U test DM vs no DM - not signif

Observations (x) in DM Delta Male pancreas weight $=13$ median $=1.699648$ rank sum $=1,710$ Observations (y) in No DM Delta Male pancreas weight $=192$ median $=0.035684$
$\mathrm{U}=1,619 \quad \mathrm{U}^{\prime}=877$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0365$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9635$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.073$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.351362(95 \%$ CI: 0.221263 to 0.51383$)$
95\% confidence interval for difference between medians or means:
Median difference $=1.578585$ (CI: -0.16675 to 3.71604 )

Mann-Whitney U test not signif
Observations ( x ) in Hypertension Delta Male pancreas weight $=23$ median $=0.660844$ rank sum $=$ 2,684.5
Observations (y) in No Hypertension Delta Male pancreas weight $=181$ median $=0.045412$
$\mathrm{U}=2,408.5 \quad \mathrm{U}^{\prime}=1,754.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.111$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.889(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.222$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.421451(95 \%$ CI: 0.307503 to 0.546347$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.70512$ (CI: -0.47865 to 1.86818)

Mann-Whitney U test- not signif
Observations ( x ) in SGA Delta Male pancreas weight $=71$ median $=0.541467$ rank sum $=7,822$
Observations (y) in Non SGA Delta Male pancreas weight $=135$ median $=-0.188047$
$\mathrm{U}=5,266$

$$
\mathrm{U}^{\prime}=4,319
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1226$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.8774(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.2451$ ( H 1 : x tends to be distributed differently to y )

Theta $(\mathrm{U} ' / \mathrm{mn})=0.4506(95 \% \mathrm{CI}: 0.370867$ to 0.533519$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.42066(\mathrm{CI}:-0.28504$ to 1.0537 )

Mann-Whitney U test mac vs non mac - not signif
Observations (x) in Macerated Delta Male pancreas weight $=165$ median $=0.111087$ rank sum $=$ 17,073
Observations (y) in Non Macerated Delta Male pancreas weight $=39$ median $=-0.136472$
$\mathrm{U}=3,378 \quad \mathrm{U}^{\prime}=3,057$
Normalised statistic $=0.484079($ adjusted for ties $)$
Lower side $\mathrm{P}=0.6858(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.3142$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6283(\mathrm{H} 1$ : x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.475058(95 \%$ CI: 0.377783 to 0.574667$)$
$95 \%$ confidence interval for difference between medians or means:

Median difference $=0.19336$ (CI: -0.66823 to 1.05045)
Mann-Whitney U test AI vs UE not signif
Observations (x) in COD AI Delta Male pancreas weight $=14$ median $=0.476463$ rank sum $=1,255.5$
Observations (y) in COD UE Delta Male pancreas weight $=136$ median $=-0.16226$
$\mathrm{U}=1,150.5 \quad \mathrm{U}^{\prime}=753.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1013$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8987$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.2025$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.395746$ ( $95 \%$ CI: 0.259678 to 0.55395 )
$\mathbf{9 5 \%}$ confidence interval for difference between medians or means:
Median difference $=0.755065$ (CI: -0.37925 to 2.09186)

Mann-Whitney U test Placent vs UE not signif
Observations ( x ) in COD UE Delta Male pancreas weight $=136$ median $=-0.16226$ rank sum $=$ 10,435.5
Observations (y) in COD Placenta Delta Male pancreas weight $=19$ median $=0.579237$
$\mathrm{U}=1,119.5 \quad \mathrm{U}=1,464.5$
Normalised statistic $=-0.941182$ (adjusted for ties)
Lower side $\mathrm{P}=0.1733$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.8267(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.3466$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.566757(95 \%$ CI: 0.42943 to 0.692883$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.502135(\mathrm{CI}:-1.54838$ to 0.61704$)$

Mann-Whitney U test not signif

Observations ( x ) in Overweight Delta Male spleen weight $=28$ median $=-0.06735$ rank sum $=929.5$
Observations ( y ) in Obese Delta Male spleen weight $=49$ median $=0.408361$
$\mathrm{U}=523.5 \quad \mathrm{U}^{\prime}=848.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0429$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9571$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0858$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.61844(95 \%$ CI: 0.483623 to 0.734657$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.66701(\mathrm{CI}:-1.56858$ to 0.076$)$
Mann-Whitney U test
Observations ( x ) in Overweight Delta Male spleen weight $=28$ median $=-0.06735$ rank sum $=811.5$
Observations (y) in normal Delta Male spleen weight $=36$ median $=0.278793$
$\mathrm{U}=405.5 \quad \mathrm{U}^{\prime}=602.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0925(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9075$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.1849$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.597718(95 \% \mathrm{CI}: 0.454756$ to 0.723437$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=-0.38666(\mathrm{CI}:-1.12329$ to 0.21872 )
Mann-Whitney U test

Observations (x) in normal Delta Male spleen weight $=36$ median $=0.278793$ rank sum $=1,475$
Observations (y) in Obese Delta Male spleen weight $=49$ median $=0.408361$
$\mathrm{U}=809 \quad \mathrm{U}^{\prime}=955$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2598$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7402(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.5196$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.541383(95 \% \mathrm{CI}: 0.41848$ to 0.658563$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.215145(\mathrm{CI}:-0.89159$ to 0.48281$)$

## Mann-Whitney U test not signif

Observations (x) in Obese Delta Male spleen weight $=49$ median $=0.408361$ rank sum $=1,404$
Observations (y) in Underweight Delta Male spleen weight $=9$ median $=1.107053$
$\mathrm{U}=179 \quad \mathrm{U}^{\prime}=262$
Exact probability:
Lower side $\mathrm{P}=0.1924$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.8076$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.3848$ ( H 1 : x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.594104(95 \%$ CI: 0.392939 to 0.76434$)$
$95 \%$ confidence interval for difference between medians or means
Median difference $=-0.70157(\mathrm{CI}:-2.28531$ to 1.0366$)$

Mann-Whitney U test not signif

Observations (x) in Hypertension Delta Male spleen weight $=25$ median $=0.279869$ rank sum $=$ 3,352.5
Observations (y) in No Hypertension Delta Male spleen weight $=228$ median $=0.139803$
$\mathrm{U}=3,027.5 \quad \mathrm{U}^{\prime}=2,672.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3059$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.6941(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.6118(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.46886(95 \%$ CI: 0.355576 to 0.586126$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.187735(\mathrm{CI}:-0.60815$ to 0.97859$)$

Mann-Whitney U test not signif

Observations (x) in DM Delta Male spleen weight $=16$ median $=0.286342$ rank sum $=2,155$
Observations (y) in No DM Delta Male spleen weight $=241$ median $=0.126829$
$\mathrm{U}=2,019 \quad \mathrm{U}^{\prime}=1,837$
Exact probability (adjusted for ties):

Lower side $\mathrm{P}=0.3774(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6226(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.7549$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.4764$ ( $95 \%$ CI: 0.339401 to 0.617761 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.09818$ (CI: -0.67191 to 0.76362)
Mann-Whitney U test mac vs non mac - not signif
Observations ( x ) in Macerated Delta Male spleen weight $=206$ median $=0.212711$ rank sum $=26,839$
Observations (y) in Non Macerated Delta Male spleen weight $=47$ median $=-0.07122$
$\mathrm{U}=5,518 \quad \mathrm{U}^{\prime}=4,164$
Normalised statistic $=1.495481($ adjusted for ties $)$
Lower side $\mathrm{P}=0.9326$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.0674$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.1348$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.430076$ ( $95 \% \mathrm{CI}: 0.343958$ to 0.521613 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.335085$ (CI: -0.11553 to 0.77038 )
Mann-Whitney U test- not signif
Observations (x) in SGA Delta Male spleen weight $=101$ median $=0.277716$ rank sum $=13,672.5$
Observations (y) in Non SGA Delta Male spleen weight $=156$ median $=-0.040245$
$\mathrm{U}=8,521.5 \quad \mathrm{U}^{\prime}=7,234.5$
Normalised statistic $=1.105624($ adjusted for ties $)$

Lower side $\mathrm{P}=0.8656$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.1344$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.2689$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.459158$ ( $95 \%$ CI: 0.388951 to 0.531385 )
95\% confidence interval for difference between medians or means:
Median difference $=0.210425$ (CI: -0.17974 to 0.54974 )

Mann-Whitney U test not signif
Observations (x) in COD AI Delta Male spleen weight $=19$ median $=-0.373458$ rank sum $=1,446.5$
Observations (y) in COD UE Delta Male spleen weight $=158$ median $=0.05783$
$\mathrm{U}=1,256.5 \quad \mathrm{U}=1,745.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1245$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8755$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.2491(\mathrm{H} 1$ : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.581446(95 \%$ CI: 0.444702 to 0.704766$)$
95\% confidence interval for difference between medians or means:
Median difference $=-0.31631$ (CI: -0.83502 to 0.26412 )

Mann-Whitney U test not signif
Observations ( x ) in COD UE Delta Male spleen weight $=158$ median $=0.05783$ rank sum $=14,489.5$
Observations (y) in COD placenta Delta Male spleen weight $=29$ median $=0.676528$
$\mathrm{U}=1,928.5 \quad \mathrm{U}^{\prime}=2,653.5$
Normalised statistic $=-1.352985$ (adjusted for ties)
Lower side $\mathrm{P}=0.088$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.912(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.1761$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.579114$ ( $95 \%$ CI: 0.464853 to 0.684058 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.41911$ (CI: -0.98335 to 0.23775 )
Mann-Whitney U test
Observations (x) in OW Delta Male Thymus weight $=28$ median $=-0.147124$ rank sum $=875.5$
Observations (y) in Normal Delta Male Thymus weight $=36$ median $=-0.091578$
$\mathrm{U}=469.5 \quad \mathrm{U}^{\prime}=538.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3226$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.6774(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.6452$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.534226(95 \%$ CI: 0.394456 to 0.66791$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=-0.11705$ (CI: -0.53744 to 0.27225 )

Mann-Whitney U test overweight vs obese - not signif
Observations ( x ) in Overweight Delta Male Thymus weight $=28$ median $=-0.147124$ rank sum $=$ 1,013

Observations (y) in Obese Delta Male Thymus weight $=43$ median $=-0.201964$
$U=607$

$$
\mathrm{U}^{\prime}=597
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4779$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.5221$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.9558$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.495847(95 \% \mathrm{CI}: 0.363786$ to 0.6286$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.00723(\mathrm{CI}:-0.5499$ to 0.52068$)$
Mann-Whitney U test

Observations ( x ) in Normal Delta Male Thymus weight $=36$ median $=-0.091578$ rank sum $=1,506$
Observations (y) in Obese Delta Male Thymus weight $=43$ median $=-0.201964$
$\mathrm{U}=840 \quad \mathrm{U}^{\prime}=708$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2598$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7402(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.5196$ ( H 1 : x tends to be distributed differently to y )
Theta $(\mathrm{U} ' / \mathrm{mn})=0.457364(95 \% \mathrm{CI}: 0.337158$ to 0.583786$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.17357(\mathrm{CI}:-0.30562$ to 0.66209$)$

Mann-Whitney U test- UW vs obese - not signif

Observations ( x ) in Obese Delta Male Thymus weight $=43$ median $=-0.201964$ rank sum $=1,117$
Observations (y) in Underweight Delta Male Thymus weight $=9$ median $=0.042587$
$\mathrm{U}=171$
$\mathrm{U}^{\prime}=216$

Exact probability:
Lower side $\mathrm{P}=0.3003(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.6997$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.6005$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.55814(95 \%$ CI: 0.358958 to 0.737792$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.29185$ (CI: -1.09456 to 0.69096 )

Mann-Whitney U test BP vs no BP - Not signif
Observations ( x ) in Hypertension Delta Male Thymus weight $=26$ median $=-0.275827$ rank sum $=$ 2,967
Observations (y) in No Hypertension Delta Male Thymus weight $=229$ median $=-0.144582$
$\mathrm{U}=2,616$

## $\mathrm{U}^{\prime}=3,338$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1567$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8433$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.3133$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.560632$ ( $95 \% \mathrm{CI}: 0.444204$ to 0.669577 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.15815$ (CI: -0.47784 to 0.15396 )

Mann-Whitney U test- DM vs no DM not signif.
Observations (x) in DM Delta Male Thymus weight $=16$ median $=0.170297$ rank sum $=2,458$
Observations (y) in No DM Delta Male Thymus weight $=240$ median $=-0.192419$
$\mathrm{U}=2,322 \quad \mathrm{U}^{\prime}=1,518$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0813$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9187(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.1627(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.395313(95 \% \mathrm{CI}: 0.268705$ to 0.541081$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.325805(\mathrm{CI}:-0.14941$ to 0.77685$)$

Mann-Whitney U test- significant!
Observations (x) in SGA Delta Male Thymus weight $=98$ median $=-0.467297$ rank sum $=8,383.5$
Observations (y) in Non SGA Delta Male Thymus weight $=161$ median $=0.156998$
$\mathrm{U}=3,532.5 \quad \mathrm{U}^{\prime}=12,245.5$
Normalised statistic $=-7.451032$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.776112(95 \% \mathrm{CI}: 0.711644$ to 0.828122$)$
$95 \%$ confidence interval for difference between medians or means:

Median difference $=-0.749705(\mathrm{CI}:-0.96449$ to -0.55176$)$
Mann-Whitney U test AI vs UE not signif
Observations (x) in AI Delta Male Thymus weight $=21$ median $=0.158441$ rank sum $=2,273.5$
Observations (y) in UE Delta Male Thymus weight $=158$ median $=-0.109444$
$\mathrm{U}=2,042.5 \quad \mathrm{U}^{\prime}=1,275.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0429(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9571$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0858$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.384418(95 \%$ CI: 0.270182 to 0.516117$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.29269$ (CI: -0.05022 to 0.67844 )
Mann-Whitney U test- UE vs Placenta - SIGNIFICANT!!
Observations ( x ) in UE Delta Male Thymus weight $=158$ median $=-0.109444$ rank sum $=15,983$
Observations (y) in Placenta Delta Male Thymus weight $=30$ median $=-0.614358$
$\mathrm{U}=3,422 \quad \mathrm{U}^{\prime}=1,318$
Normalised statistic $=3.850234$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.278059(95 \%$ CI: 0.192838 to 0.387529$)$
$95 \%$ confidence interval for difference between medians or means:

Median difference $=0.574685$ (CI: 0.29707 to 0.90223 )

## Mann-Whitney U test Mac vs non Mac - SIGNIFICANT!

Observations (x) in Macerated Delta Male Thymus weight $=208$ median $=-0.235497$ rank sum $=$ 24,726
Observations (y) in Non Macerated Delta Male Thymus weight $=47$ median $=0.158441$
$\mathrm{U}=2,990 \quad \mathrm{U}^{\prime}=6,786$
Normalised statistic $=-4.156109$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.694149(95 \%$ CI: 0.605073 to 0.768779$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.60182(\mathrm{CI}:-0.92829$ to -0.32375 )

Mann-Whitney U test - significant!
Observations (x) in SGA Delta Male Thyroid weight $=16$ median $=-0.379526$ rank sum $=386$
Observations ( y ) in Non SGA Delta Male Thyroid weight $=49$ median $=-0.078426$
$\mathrm{U}=250 \quad \mathrm{U}^{\prime}=534$

Exact probability (adjusted for ties):
Lower side $P=0.0149$ (H1: x tends to be less than y)
Upper side $\mathrm{P}=0.9851$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.0299$ ( H 1 : x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.681122(95 \% \mathrm{CI}: 0.517077$ to 0.805573$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.34822(\mathrm{CI}:-0.69926$ to -0.03807$)$

Mann-Whitney U test mac vs no mac - SIGNIFICANT!
Mac thyroids lighter
Observations (x) in Macerated Delta Male Thyroid weight $=53$ median $=-0.196028$ rank sum $=1,591$
Observations (y) in Non Macerated Delta Male Thyroid weight $=12$ median $=0.491753$
$\mathrm{U}=160 \quad \mathrm{U}^{\prime}=476$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0033$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9967(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.0065$ ( H 1 : x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.748428(95 \% \mathrm{CI}: 0.568226$ to 0.865193$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.749105(\mathrm{CI}:-1.3263$ to -0.22065 )

## Mann-Whitney U test - AI vs UE not signif

Observations (x) in AI Delta Male Heart Weight $=21$ median $=0.194275$ rank sum $=2,093$
Observations (y) in UE Delta Male Heart Weight $=158$ median $=-0.024829$
$\mathrm{U}=1,862 \quad \mathrm{U}^{\prime}=1,456$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1831$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.8169$ ( H 1 : x tends to be greater than y )

Two sided $\mathrm{P}=0.3662$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.438819$ ( $95 \%$ CI: 0.317905 to 0.569064 )
95\% confidence interval for difference between medians or means:
Median difference $=0.20704$ (CI: -0.28489 to 0.64288 )

## Mann-Whitney U test UE vs Placenta - SIGNIFICANT

Observations ( x ) in UE Delta Male Heart Weight $=158$ median $=-0.024829$ rank sum $=16,084.5$
Observations (y) in Placenta Delta Male Heart Weight $=30$ median $=-0.941285$
$\mathrm{U}=3,523.5 \quad \mathrm{U}=1,216.5$
Normalised statistic $=4.221713$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y )
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.256646$ ( $95 \%$ CI: 0.175047 to 0.364514 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.775425$ (CI: 0.45569 to 1.11425)
Mann-Whitney U test BP vs no BP not signif
Observations (x) in Hypertension Delta Male Heart Weight $=26$ median $=-0.070624$ rank sum $=3,517$
Observations (y) in No Hypertension Delta Male Heart Weight $=230$ median $=-0.225605$
$\mathrm{U}=3,166 \quad \mathrm{U}^{\prime}=2,814$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3127$ (H1: x tends to be less than y )

Upper side $\mathrm{P}=0.6873(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.6253$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.470569(95 \% \mathrm{CI}: 0.359029$ to 0.585749$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.110275(\mathrm{CI}:-0.32556$ to 0.5496$)$
Mann-Whitney U test DM vs no DM not signif

Observations (x) in DM Delta Male Heart Weight $=16$ median $=0.184524$ rank sum $=2,480.5$
Observations (y) in No DM Delta Male Heart Weight $=241$ median $=-0.226315$
$\mathrm{U}=2,344.5 \quad \mathrm{U}^{\prime}=1,511.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0747$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9253(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.1494(\mathrm{H} 1$ : x tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.391987(95 \% \mathrm{CI}: 0.265898$ to 0.537827$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.41116(\mathrm{CI}:-0.14795$ to 1.02994$)$

Mann-Whitney U test Mac vs Non Mac - SIGNIFICANT!
Macerated hearts lighter
Observations (x) in Macerated Delta Male Heart Weight $=208$ median $=-0.296937$ rank sum $=25,048$
Observations (y) in Non Macerated Delta Male Heart Weight $=48$ median $=0.34349$

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\(\mathrm{U}=3,312\)
\(U^{\prime}=6,672\)
```

Normalised statistic $=-3.633134($ adjusted for ties $)$
Lower side $\mathrm{P}=0.0001$ ( H 1 : x tends to be less than y )

Upper side $\mathrm{P}=0.9999(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.0003(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.668269(95 \% \mathrm{CI}: 0.578876$ to 0.745203$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.65319$ (CI: -0.97886 to -0.31635 )
Mann-Whitney U test- significant!

Observations (x) in SGA Delta Male Heart Weight $=98$ median $=-0.753485$ rank sum $=7,886$
Observations (y) in Non SGA Delta Male Heart Weight $=159$ median $=0.216153$
$\mathrm{U}=3,035 \quad \mathrm{U}^{\prime}=12,547$
Normalised statistic $=-8.216963($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.805224(95 \%$ CI: 0.743347 to 0.85361$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-1.028145$ (CI: -1.26696 to -0.79483 )

Mann-Whitney U test not signif
Observations (x) in Overweight Delta Male Heart Weight $=27$ median $=-0.018186$ rank sum $=1,161.5$
Observations (y) in Obese Delta Male Heart Weight $=51$ median $=-0.1815$
$\mathrm{U}=783.5 \quad \mathrm{U}^{\prime}=593.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1609$ (H1: x tends to be less than y )

Upper side $\mathrm{P}=0.8391(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.3218$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.431009(95 \% \mathrm{CI}: 0.307912$ to 0.565131$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.29703(\mathrm{CI}:-0.25266$ to 0.90969 )

## Mann-Whitney U test

Observations (x) in Overweight Delta Male Heart Weight $=27$ median $=-0.018186$ rank sum $=947$
Observations (y) in Normal Delta Male Heart Weight $=36$ median $=-0.227532$
$\mathrm{U}=569 \quad \mathrm{U}^{\prime}=403$
Exact probability:
Lower side $\mathrm{P}=0.1269$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.8731(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.2539(\mathrm{H} 1$ : x tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.414609(95 \% \mathrm{CI}: 0.286018$ to 0.558582$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.25893(\mathrm{CI}:-0.21247$ to 0.73554$)$

Mann-Whitney U test
Observations (x) in Normal Delta Male Heart Weight $=36$ median $=-0.227532$ rank sum $=1,618$
Observations (y) in Obese Delta Male Heart Weight $=51$ median $=-0.1815$
$\mathrm{U}=952 \quad \mathrm{U}^{\prime}=884$

Exact probability:
Lower side $\mathrm{P}=0.387(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.613$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.774$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.481481(95 \% \mathrm{CI}: 0.3633$ to 0.602189$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.07442$ (CI: -0.40828 to 0.52325 )

## Body:Organ ratios:

## Females:

## Mann-Whitney U test AI vs UE - SIGNIFICANT!

Observations ( $x$ ) in AI COD Female Body: Brain wt ratio $=68$ median $=6.517746$ rank sum $=8,308.5$
Observations (y) in UE COD Female Body: Brain wt ratio $=234$ median $=7.279039$
$\mathrm{U}=5,962.5 \quad \mathrm{U}^{\prime}=9,949.5$
Normalised statistic $=-3.145019$ (adjusted for ties)
Lower side $\mathrm{P}=0.0008$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9992$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0017$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.625283(95 \%$ CI: 0.54764 to 0.695874$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.72644(\mathrm{CI}:-1.18532$ to -0.27514$)$

## Mann-Whitney U test- UE vs Placenta not signif

Observations (x) in UE COD Female Body: Brain wt ratio $=234$ median $=7.279039$ rank sum $=$
30,159
Observations (y) in Placenta COD Female Body: Brain wt ratio $=18$ median $=6.80043$
$\mathrm{U}=2,664 \quad \mathrm{U}^{\prime}=1,548$

Exact probability:
Lower side $\mathrm{P}=0.0305$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9695$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.061(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.367521(95 \% \mathrm{CI}: 0.250736$ to 0.506176$)$

95\% confidence interval for difference between medians or means:
Median difference $=0.91207(\mathrm{CI}:-0.04177$ to 1.94335$)$

## Mann-Whitney U test Mac vs non Mac - SIGNIFICANT

Observations (x) in Macerated Female Body: Brain wt ratio $=269$ median $=7.125984$ rank sum $=$ 54,002
Observations (y) in Non Macerated Female Body: Brain wt ratio $=109$ median $=6.509828$

## $\mathrm{U}=17,687 \quad \mathrm{U}^{\prime}=11,634$

Normalised statistic $=3.145012$
Lower side $\mathrm{P}=0.9992$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.0008$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0017(\mathrm{H} 1$ : x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.39678(95 \%$ CI: 0.336709 to 0.460866$)$

95\% confidence interval for difference between medians or means:
Median difference $=0.61243$ (CI: 0.23616 to 0.97708 )
Mann-Whitney U test- significant!
Observations (x) in SGA Female Body: Brain wt ratio $=75$ median $=6.931818$ rank sum $=6,380$
Observations (y) in Non SGA Female Body: Brain wt ratio $=137$ median $=7.665877$
$\mathrm{U}=3,530 \quad \mathrm{U}^{\prime}=6,745$
Exact probability:
Lower side P < 0.0001 (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.656448$ ( $95 \%$ CI: 0.576141 to 0.727304 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.87647(\mathrm{CI}:-1.36074$ to -0.42595$)$
Mann-Whitney U test - not signif
Observations ( x ) in UE UE Non SGA Female Body: Brain wt ratio $=45$ median $=7.458034$ rank sum = 1,160
Observations (y) in UE Placenta Non SGA Female Body: Brain wt ratio = 8 median $=7.686119$
$\mathrm{U}=125 \quad \mathrm{U}^{\prime}=235$
Exact probability:
Lower side $\mathrm{P}=0.0896$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9104$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.1792$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.652778(95 \%$ CI: 0.435836 to 0.815266$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.710285(\mathrm{CI}:-1.91641$ to 0.37688$)$

Mann-Whitney U test Mac vs Non Mac - SIGNIFICANT!!
Observations (x) in Macerated Female Body:Thymus Ratio $=275$ median $=517.857143$ rank sum $=$ 56,002
Observations (y) in Non macerated Female Body:Thymus Ratio $=111$ median $=385.571429$
$\mathrm{U}=18,052 \quad \mathrm{U}^{\prime}=12,473$
Normalised statistic $=2.811472($ adjusted for ties $)$
Lower side $\mathrm{P}=0.9975$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.0025$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0049(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.408616(95 \%$ CI: 0.348527 to 0.472202$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=90.2198$ (CI: 26.6578 to 156.015)

Mann-Whitney U test AI vs UR - not signif.
Observations (x) in COD AI Female Body:Thymus Ratio $=72$ median $=415.734807$ rank sum $=$ 11,086
Observations (y) in Unexplained Female Body:Thymus Ratio $=233$ median $=463.4$
$\mathrm{U}=8,458 \quad \mathrm{U}^{\prime}=8,318$
Exact probability:
Lower side $\mathrm{P}=0.4578$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.5422$ (H1: x tends to be greater than y )

Two sided $\mathrm{P}=0.9156$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.495827$ ( $95 \%$ CI: 0.420593 to 0.571291 )
95\% confidence interval for difference between medians or means:
Median difference $=3.5956$ (CI: -74.2451 to 76.5653)

## Mann-Whitney U test Placenta vs UE - SIGNIFICANT!

Observations (x) in Unexplained Female Body:Thymus Ratio $=233$ median $=463.4$ rank sum $=28,494$
Observations (y) in Placenta Female Body:Thymus Ratio $=19$ median $=982.089552$
$\mathrm{U}=1,233 \quad \mathrm{U}^{\prime}=3,194$
Exact probability:
Lower side $\mathrm{P}=0.0005(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9995$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.721482(95 \%$ CI: 0.58884 to 0.820315$)$
95\% confidence interval for difference between medians or means:
Median difference $=-398.3342(\mathrm{CI}:-840$ to -155.9596$)$

Mann-Whitney U test- significant!
Observations ( x ) in SGA Female Body:Thymus Ratio $=76$ median $=528.673724$ rank sum $=10,476$
Observations (y) in Non SGA Female Body:Thymus Ratio $=140$ median $=333.824199$
$\mathrm{U}=7,550 \quad \mathrm{U}^{\prime}=3,090$
Exact probability:

Lower side $\mathrm{P}<0.0001(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.290414$ ( $95 \%$ CI: 0.225256 to 0.367731 )
95\% confidence interval for difference between medians or means:
Median difference $=173.2328$ (CI: 107.7621 to 240.6687)
Mann-Whitney U test not signif
Observations (x) in UEUE Non SGA Female Body:Thymus Ratio $=47$ median $=356.23053$ rank sum
$=1,308$
Observations (y) in UE Placenta Non SGA Female Body:Thymus Ratio $=7$ median $=337.15847$

$$
\mathrm{U}=180 \quad \mathrm{U}^{\prime}=149
$$

Exact probability:
Lower side $\mathrm{P}=0.3527$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.6473$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.7053$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.452888(95 \%$ CI: 0.256174 to 0.668117$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=32.8125$ (CI: -70.4918 to 180.6986)

## Mann-Whitney U test AI vs UE - SIGNIFICANT!

Observations ( x ) in COD AI Female Body:heart ratio $=71$ median $=139.344262$ rank sum $=9,274$
Observations (y) in Unexplained Female Body:heart ratio $=245$ median $=159.558011$
$\mathrm{U}=6,718 \quad \mathrm{U}^{\prime}=10,677$

Normalised statistic $=-2.920144$ (adjusted for ties)
Lower side $\mathrm{P}=0.0017$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9983$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0035$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.613797(95 \%$ CI: 0.537683 to 0.683751$)$

95\% confidence interval for difference between medians or means:
Median difference $=-15.31992$ (CI: -25.48157 to -5.28337 )

Mann-Whitney U test Placenta vs UE - not signif.
Observations (x) in Unexplained Female Body:heart ratio $=245$ median $=159.558011$ rank sum $=$ 32,378
Observations (y) in Placenta Female Body:heart ratio $=19$ median $=157.391304$
$\mathrm{U}=2,243 \quad \mathrm{U}^{\prime}=2,412$
Normalised statistic $=-0.263551$ (adjusted for ties)
Lower side $\mathrm{P}=0.3961$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.6039$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.7921$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.518153(95 \%$ CI: 0.387366 to 0.646035$)$
95\% confidence interval for difference between medians or means:
Median difference $=-2.29$ (CI: -20.29524 to 16.29791)

Mann-Whitney U test

Observations (x) in Macerated Female Body:heart ratio $=283$ median $=160.973684$ rank sum $=$ 60,522.5
Observations (y) in Non Macerated Female Body:heart ratio $=115$ median $=138$
$\mathrm{U}=20,336.5 \quad \mathrm{U}^{\prime}=12,208.5$
Normalised statistic $=3.906751$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}<0.0001$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.375127(95 \% \mathrm{CI}: 0.317668$ to 0.437169$)$

95\% confidence interval for difference between medians or means:
Median difference $=17.3589(\mathrm{CI}: 8.82902$ to 25.51432 $)$
Mann-Whitney U test not significant anymore!

Observations (x) in Normal BMI Female Body:heart ratio $=52$ median $=156.284382$ rank sum $=3,153$
Observations (y) in Overweight Female Body:heart ratio $=70$ median $=150.593168$
$\mathrm{U}=1,775 \quad \mathrm{U}^{\prime}=1,865$
Exact probability:
Lower side $\mathrm{P}=0.4092$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.5908$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.8185$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.512363(95 \% \mathrm{CI}: 0.410398$ to 0.613106$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-2.036855(\mathrm{CI}:-21.48674$ to 16.92632 )

Mann-Whitney U test Normal vs OW - Not signif
Observations (x) in Normal Female Body:liver wt ratio $=51$ median $=25.671642$ rank sum $=3,275$
Observations (y) in Overweight Female Body:liver wt ratio $=71$ median $=25.883069$
$\mathrm{U}=1,949 \quad \mathrm{U}^{\prime}=1,672$
Exact probability:
Lower side $\mathrm{P}=0.2376$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7624(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.4752$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.461751(95 \%$ CI: 0.362337 to 0.564956$)$
95\% confidence interval for difference between medians or means:
Median difference $=1.24683$ (CI: -2.57505 to 5.41824 )
Mann-Whitney U test Mac vs Non Mac - SIGNIFICANT!
Observations ( x ) in Macerated Female Body:liver wt ratio $=281$ median $=27.684564$ rank sum $=$ 64,383.5
Observations (y) in Non Macerated Female Body:liver wt ratio $=116$ median $=18.544441$
$\mathrm{U}=24,762.5 \quad \mathrm{U}^{\prime}=7,833.5$
Normalised statistic $=8.140822$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.240321(95 \%$ CI: 0.193148 to 0.296345$)$
95\% confidence interval for difference between medians or means:

Median difference $=8.22891$ (CI: 6.45631 to 9.98003 )

## Mann-Whitney U test AI vs UE - SIGNIFICANT!

Observations (x) in AI Female Body:liver wt ratio $=72$ median $=16.938061$ rank sum $=6,032.5$
Observations (y) in Unexplained Female Body:liver wt ratio $=244$ median $=26.537896$
$\mathrm{U}=3,404.5 \quad \mathrm{U}^{\prime}=14,163.5$
Normalised statistic $=-7.89663($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.80621(95 \%$ CI: 0.741432 to 0.856277$)$
95\% confidence interval for difference between medians or means:
Median difference $=-9.047525(\mathrm{CI}:-10.99924$ to -6.96404$)$
Mann-Whitney U test - Placenta vs UE - SIGNIFICANT!
Observations ( x ) in Unexplained Female Body:liver wt ratio $=244$ median $=26.537896$ rank sum $=$ 30,985
Observations (y) in Placenta Female Body:liver wt ratio $=19$ median $=44.461404$
$\mathrm{U}=1,095 \quad \mathrm{U}^{\prime}=3,541$
Exact probability:
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.763805(95 \%$ CI: 0.634842 to 0.853553$)$

95\% confidence interval for difference between medians or means:
Median difference $=-15.134685$ (CI: -22.55231 to -7.27148 )

Mann-Whitney U test- significant!
Observations ( x ) in SGA Female Body:liver wt ratio $=78$ median $=31.241029$ rank sum $=10,356$
Observations (y) in Non SGA Female Body:liver wt ratio $=141$ median $=25.81262$
$\mathrm{U}=7,275 \quad \mathrm{U}^{\prime}=3,723$
Exact probability:
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.338516$ ( $95 \%$ CI: 0.269244 to 0.417195 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=5.826265$ (CI: 2.93504 to 8.82651)
Mann-Whitney U test not signif.
Observations (x) in UE UE Non SGA Female Body:liver wt ratio $=48$ median $=27.755862$ rank sum $=$ 1,366
Observations (y) in UE Placenta Non SGAFemale Body:liver wt ratio $=8$ median $=26.218964$
$\mathrm{U}=190 \quad \mathrm{U}^{\prime}=194$
Exact probability:
Lower side $\mathrm{P}=0.4863$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.5137$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.9725$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.505208(95 \% \mathrm{CI}: 0.307288$ to 0.701259$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-0.20646(\mathrm{CI}:-6.86144$ to 7.25001$)$

## Males:

Mann-Whitney U test Mac vs non Mac - noty signif

Observations (x) in Macerated Male Body: brain wt ratio $=331$ median $=6.941772$ rank sum $=78,768$
Observations (y) in Non Macerated Male Body: brain wt ratio $=135$ median $=6.714286$
$\mathrm{U}=23,822 \quad \mathrm{U}^{\prime}=20,863$
Normalised statistic $=1.121931$ (adjusted for ties)
Lower side $P=0.8691$ (H1: $x$ tends to be less than $y$ )
Upper side $\mathrm{P}=0.1309(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.2619$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.46689(95 \%$ CI: 0.410194 to 0.524646$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.20089(\mathrm{CI}:-0.14465$ to 0.55453$)$

## Mann-Whitney U test- AI Vs UE - SIGNIFICANT!

Observations ( x ) in AI Male Body: brain wt ratio $=73$ median $=6.514658$ rank sum $=10,834$
Observations (y) in Unexplained Male Body: brain wt ratio $=292$ median $=7.171119$
$\mathrm{U}=8,133 \quad \mathrm{U}^{\prime}=13,183$

Normalised statistic $=-3.131545($ adjusted for ties $)$
Lower side $\mathrm{P}=0.0009$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9991$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0017$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.618456$ ( $95 \%$ CI: 0.544679 to 0.686186 )
95\% confidence interval for difference between medians or means:
Median difference $=-0.626595$ (CI: -1.03791 to -0.23658 )

## Mann-Whitney U test UE vs Placenta - SIGNIFICANT!

Observations (x) in Unexplained Male Body: brain wt ratio $=292$ median $=7.171119$ rank sum $=$ 48,700
Observations (y) in Placenta Male Body: brain wt ratio $=31$ median $=6.146667$
$\mathrm{U}=5,922 \quad \mathrm{U}^{\prime}=3,130$
Normalised statistic $=2.823783$ (adjusted for ties)
Lower side $\mathrm{P}=0.9976$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.0024$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}=0.0047$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.34578$ ( $95 \% \mathrm{CI}: 0.255033$ to 0.452226 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=1.042805$ (CI: 0.34498 to 1.7605)
ann-Whitney U test- significant!

Observations (x) in SGA Male Body: brain wt ratio $=95$ median $=6.062016$ rank sum $=8,010$ Observations (y) in Non SGA Male Body: brain wt ratio $=153$ median $=7.78872$
$\mathrm{U}=3,450 \quad \mathrm{U}^{\prime}=11,085$
Normalised statistic $=-6.951244$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.762642(95 \%$ CI: 0.695669 to 0.817178$)$
95\% confidence interval for difference between medians or means:
Median difference $=-1.7849$ (CI: -2.24572 to -1.32711 )
Mann-Whitney U test UE vs UE placenta - not signif.
Observations ( x ) in UE UE Non SGA Male Body: brain wt ratio $=45$ median $=7.583832$ rank sum $=$ 1,262
Observations (y) in UE placenta non SGA Male Body: brain wt ratio $=14$ median $=8.168087$
$\mathrm{U}=227 \quad \mathrm{U}^{\prime}=403$

Exact probability:
Lower side $\mathrm{P}=0.0599(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.9401(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.1198$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.639683$ ( $95 \%$ CI: 0.465577 to 0.779442 )
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=-0.722055$ (CI: -1.70802 to 0.10417 )

## Mann-Whitney U test - AI vs UE - SIGNIFICANT!

Observations (x) in COD AI Male Body:heart ratio $=74$ median $=145.237395$ rank sum $=12,478$
Observations (y) in Unexplained Male Body:heart ratio $=309$ median $=155$
$\mathrm{U}=9,703 \quad \mathrm{U}^{\prime}=13,163$
Exact probability:
Lower side $\mathrm{P}=0.0215$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9785(\mathrm{H}: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.043$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.575658(95 \%$ CI: 0.502338 to 0.64516$)$
95\% confidence interval for difference between medians or means:
Median difference $=-10.39899($ CI: -20.91667 to -0.37287$)$

## Mann-Whitney U test UE vs Placenta - not signif

Observations (x) in Unexplained Male Body:heart ratio $=309$ median $=155$ rank sum $=52,226$
Observations (y) in Placenta Male Body:heart ratio $=32$ median $=164.043528$
$\mathrm{U}=4,331 \quad \mathrm{U}^{\prime}=5,557$

Exact probability:
Lower side $\mathrm{P}=0.1249(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.8751$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.2498$ (H1: x tends to be distributed differently to y )
Theta $\left(U^{\prime} / \mathrm{mn}\right)=0.561994$ ( $95 \%$ CI: 0.45724 to 0.660499 )
$95 \%$ confidence interval for difference between medians or means:

Median difference $=-8.52036$ (CI: -23.5155 to 6.39194$)$

## Mann-Whitney U test

Observations (x) in Macerated Male Body:heart ratio $=347$ median $=160.144928$ rank sum $=89,067$
Observations (y) in Non Macerated Male Body:heart ratio $=144$ median $=146.554945$
$U=28,689 \quad U^{\prime}=21,279$
Normalised statistic $=2.588513$
Lower side $\mathrm{P}=0.9952(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.0048$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.0096$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.425853(95 \%$ CI: 0.371978 to 0.481951$)$
95\% confidence interval for difference between medians or means:
Median difference $=10.52107$ (CI: 2.55735 to 18.74356)
Mann-Whitney U test OW vs Obese - not signif
Observations (x) in Overweight Male Body:Liver ratio $=57$ median $=24.242424$ rank sum $=3,746$
Observations (y) in Obese Male Body:Liver ratio $=74$ median $=24.89169$

$$
\mathrm{U}=2,093 \quad \mathrm{U}^{\prime}=2,125
$$

Exact probability:
Lower side $\mathrm{P}=0.4714$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.5286$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.9428$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.503793(95 \% \mathrm{CI}: 0.405873$ to 0.601365$)$

95\% confidence interval for difference between medians or means:
Median difference $=-0.12115$ (CI: -3.15185 to 2.92824)
Mann-Whitney U test Normal vs OW - not signif
Observations (x) in Normal Male Body:Liver ratio $=54$ median $=26.263601$ rank sum $=3,118$
Observations (y) in Overweight Male Body:Liver ratio $=57$ median $=24.242424$
$\mathrm{U}=1,633 \quad \mathrm{U}^{\prime}=1,445$
Exact probability:
Lower side $\mathrm{P}=0.2913$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.7087$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.5826$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.469461(95 \%$ CI: 0.366279 to 0.575872$)$
95\% confidence interval for difference between medians or means:
Median difference $=1.104355$ (CI: -2.73587 to 5.56955 )
Mann-Whitney U test N vs Obese - not signif
Observations (x) in Normal Male Body:Liver ratio $=54$ median $=26.263601$ rank sum $=3,583$
Observations ( y ) in Obese Male Body:Liver ratio $=74$ median $=24.89169$
$\mathrm{U}=2,098 \quad \mathrm{U}^{\prime}=1,898$
Exact probability:
Lower side $\mathrm{P}=0.3162$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.6838$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.6323$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.474975(95 \%$ CI: 0.37709 to 0.575228$)$

95\% confidence interval for difference between medians or means:
Median difference $=1.033775$ (CI: -3.0301 to 5.1103 )

Mann-Whitney U test UW vs obese - not signif
Observations (x) in Obese Male Body:Liver ratio $=74$ median $=24.89169$ rank sum $=3,150$
Observations (y) in Underweight Male Body:Liver ratio $=12$ median $=31.302593$
$\mathrm{U}=375 \quad \mathrm{U}^{\prime}=513$
Exact probability:
Lower side $\mathrm{P}=0.199$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.801(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.3979$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.577703(95 \%$ CI: 0.404547 to 0.731031$)$
95.1\% confidence interval for difference between medians or means:

Median difference $=-4.05259(\mathrm{CI}:-11.11828$ to 5.31515$)$

Mann-Whitney U test Mac vs non mac - SIGNIFICANT!
Observations ( $x$ ) in Macerated Male Body:Liver ratio $=341$ median $=30.659091$ rank sum $=98,181.5$
Observations (y) in Non Macerated Male Body:Liver ratio $=142$ median $=19.232869$
$\mathrm{U}=39,870.5 \quad \mathrm{U}=8,551.5$

Normalised statistic $=11.205326$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.176604(95 \% \mathrm{CI}: 0.139831$ to 0.221921$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=10.96272$ (CI: 9.25447 to 12.68958 )
Mann-Whitney U test - AI vs UE - SIGNIFICANT!

Observations (x) in AI Male Body:Liver ratio $=73$ median $=18.085106$ rank sum $=7,118.5$
Observations (y) in Unexplained Male Body:Liver ratio $=305$ median $=27.25$
$\mathrm{U}=4,417.5 \quad \mathrm{U}^{\prime}=17,847.5$

Normalised statistic $=-8.007662($ adjusted for ties $)$
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.801594(95 \%$ CI: 0.738397 to 0.851046$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-8.56738(\mathrm{CI}:-10.77617$ to -6.48248$)$
Mann-Whitney U test - UE vs Placenta _ SIGNIFICANT!
Observations (x) in Unexplained Male Body:Liver ratio $=305$ median $=27.25$ rank sum $=49,103$
Observations (y) in Placenta Male Body:Liver ratio $=31$ median $=39.255618$
$\mathrm{U}=2,438 \quad \mathrm{U}^{\prime}=7,017$

Exact probability:
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ ( H 1 : x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.742147(95 \%$ CI: 0.64054 to 0.820207$)$
95\% confidence interval for difference between medians or means:
Median difference $=-10.67016$ (CI: -14.48734 to -6.30504 )
Mann-Whitney U test- significant!
Observations (x) in SGA Male Body:Liver ratio $=99$ median $=34.201031$ rank sum $=15,428.5$
Observations (y) in Non SGA Male Body:Liver ratio $=159$ median $=27.785185$
$\mathrm{U}=10,478.5 \quad \mathrm{U}=5,262.5$
Normalised statistic $=4.474374($ adjusted for ties $)$
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y)
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.334318$ ( $95 \%$ CI: 0.271315 to 0.405298 )
95\% confidence interval for difference between medians or means:
Median difference $=6.96029$ (CI: 3.89095 to 9.95167)
Mann-Whitney U test UE UE vs UE placenta - SIGNIFICANT!
Observations ( x ) in UE UE Non SGAMale Body:Liver ratio $=44$ median $=26.172804$ rank sum $=$ 1,100
Observations (y) in UE placenta Non SGA Male Body:Liver ratio $=14$ median $=34.139936$
$\mathrm{U}=110 \quad \mathrm{U}^{\prime}=506$
Exact probability:
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y)
Upper side $\mathrm{P}>0.9999$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}=0.0002$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.821429(95 \% \mathrm{CI}: 0.656929$ to 0.912419$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=-8.103225(\mathrm{CI}:-11.91533$ to -4.12121$)$

Mann-Whitney U test - Mac vs non Mac - SIGNIFICANT!
Observations (x) in Macerated Male Body:thymus wt $=330$ median $=542.242798$ rank sum $=81,906$
Observations (y) in Non Macerated Male Body:thymus wt $=142$ median $=429.054054$
$\mathrm{U}=27,291 \quad \mathrm{U}^{\prime}=19,569$
Normalised statistic $=2.840919$ (adjusted for ties)
Lower side $\mathrm{P}=0.9978$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.0022(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0045$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.417606(95 \% \mathrm{CI}: 0.363381$ to 0.474359$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=90.27285(\mathrm{CI}: 27.7108$ to 155.0521$)$

Mann-Whitney U test AI vs UE - not signif
Observations (x) in AI Male Body:thymus wt $=73$ median $=542.941176$ rank sum $=14,394$
Observations (y) in Unexplained Male Body:thymus wt $=295$ median $=471.09375$
$\mathrm{U}=11,693 \quad \mathrm{U}^{\prime}=9,842$

Normalised statistic $=1.137317$ (adjusted for ties)
Lower side $\mathrm{P}=0.8723$ (H1: x tends to be less than y )

Upper side $\mathrm{P}=0.1277(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.2554$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.457023(95 \% \mathrm{CI}: 0.385355$ to 0.530913$)$
$95 \%$ confidence interval for difference between medians or means
Median difference $=46.8571$ (CI: -34.0659 to 131.6687)

## Mann-Whitney U test UE vs placenta - SIGNIFICANT

Observations (x) in Unexplained Male Body:thymus wt $=295$ median $=471.09375$ rank sum $=46,670$
Observations (y) in Placenta Male Body:thymus wt $=32$ median $=758.217593$

$$
\mathrm{U}=3,010 \quad \mathrm{U}^{\prime}=6,430
$$

Normalised statistic $=-3.366386($ adjusted for ties $)$
Lower side $\mathrm{P}=0.0004$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9996(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0008(\mathrm{H} 1$ : x tends to be distributed differently to y$)$

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.681144(95 \% \mathrm{CI}: 0.577219$ to 0.767324$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-261.7823(\mathrm{CI}:-434.5812$ to -107.9678$)$

Mann-Whitney U test- significant!
Observations (x) in SGA Male Body:thymus wt $=99$ median $=776.5$ rank sum $=17,205.5$
Observations (y) in Non SGA Male Body:thymus wt $=160$ median $=356.890681$
$\mathrm{U}=12,255.5 \quad \mathrm{U}^{\prime}=3,584.5$

Normalised statistic $=7.400582$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.226294$ ( $95 \%$ CI: 0.174084 to 0.290831 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=342.73945$ (CI: 239.6276 to 462.25 )
Mann-Whitney U test - SIGNIFICANT!
Observations ( x ) in UE UE Non SGA Male Body:thymus wt $=45$ median $=322.64$ rank sum $=1,204$
Observations (y) in UE Placenta Non SGA Male Body:thymus wt $=14$ median $=472.003434$
$\mathrm{U}=169 \quad \mathrm{U}^{\prime}=461$
Exact probability:
Lower side $\mathrm{P}=0.0042$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9958$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.0084$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.731746$ ( $95 \%$ CI: 0.558594 to 0.849577 )
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=-128.88809$ (CI: -256.2 to -39.80501 )

## Brain:Liver ratio

## Mann-Whitney U test- Mac vs Non Mac significant!

Macerated fetuses have proportioanlly smaller livers compared to non macerated
Observations (x) in Macerated Male B:L Ratio $=300$ median $=4.097955$ rank sum $=76,230$
Observations (y) in Non Macerated Male B:L Ratio $=132$ median $=2.825432$

$$
\mathrm{U}=31,080 \quad \mathrm{U}^{\prime}=8,520
$$

Normalised statistic $=9.436441$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}<0.0001(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.215152(95 \%$ CI: 0.172703 to 0.266134$)$
95\% confidence interval for difference between medians or means:
Median difference $=1.264175$ (CI: 1.02163 to 1.52224 )
Mann-Whitney U test Mac vs non mac - SIGNIFICANT!
Macerated fetus' have smaller livers propotionally to brain in macerated
Observations (x) in Macerated Female B:L ratio $=260$ median $=3.879037$ rank sum $=53,639$
Observations (y) in Non Macerated Female B:L ratio $=108$ median $=2.771078$
$\mathrm{U}=19,709 \quad \mathrm{U}^{\prime}=8,371$
Normalised statistic $=6.10078$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.298113(95 \%$ CI: 0.244076 to 0.359824$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.937745$ (CI: 0.65036 to 1.23189 )
Mann-Whitney U test
Observations ( x ) in Macerated B:L ratio $=549$ median $=3.936508$ rank sum $=248,716$
Observations (y) in Non Macerated B:L ratio $=239$ median $=2.778947$

$$
\mathrm{U}=97,741 \quad \mathrm{U}^{\prime}=33,470
$$

Normalised statistic $=10.940875$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.255085$ ( $95 \%$ CI: 0.220063 to 0.294304 )
95\% confidence interval for difference between medians or means:
Median difference $=1.08778$ (CI: 0.90203 to 1.27323 )

Mann-Whitney U test
Observations (x) in UE Mac B:L ratio $=420$ median $=3.848701$ rank sum $=116,771.5$
Observations (y) in UE No mac B:L ratio $=99$ median $=3.054518$
$\mathrm{U}=28,361.5 \quad \mathrm{U}^{\prime}=13,218.5$
Normalised statistic $=5.640644($ adjusted for ties $)$
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y )
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.317905(95 \% \mathrm{CI}: 0.263583$ to 0.378892$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0.774085$ (CI: 0.51914 to 1.04332)

## Mann-Whitney U test

Observations ( x ) in UE non mac B:L ratio $=99$ median $=3.054518$ rank sum $=11,403$

Observations ( y ) in AI non mac $\mathrm{B}: \mathrm{L}$ ratio $=101$ median $=2.654867$
$\mathrm{U}=6,453 \quad \mathrm{U}^{\prime}=3,546$
Exact probability:
Lower side $\mathrm{P}=0.0002$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9998(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0003(\mathrm{H} 1$ : x tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.354635(95 \%$ CI: 0.283829 to 0.434$)$

95\% confidence interval for difference between medians or means:
Median difference $=0.40401(\mathrm{CI}: 0.18803$ to 0.62111$)$

## Mann-Whitney U test

Observations $(x)$ in SGA B:L ratio $=150$ median $=4.84182$ rank sum $=42,522.5$
Observations $(y)$ in non SGA B:L ratio $=285$ median $=3.427812$
$\mathrm{U}=31,197.5 \quad \mathrm{U}^{\prime}=11,552.5$

Normalised statistic $=7.881364$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y )
Upper side $\mathrm{P}<0.0001(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.270234(95 \% \mathrm{CI}: 0.224255$ to 0.322914$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=1.375605(\mathrm{CI}: 1.03239$ to 1.72505$)$

Mann-Whitney U test
Observations (x) in SGA with placenta COD B:L ratio $=51$ median $=6.03681$ rank sum $=4,976$
Observations (y) in SGA -non placenta COD B:L ratio $=101$ median $=4.271914$
$\mathrm{U}=3,650 \quad \mathrm{U}^{\prime}=1,501$
Exact probability:
Lower side $\mathrm{P}<0.0001(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.2914$ ( $95 \% \mathrm{CI}: 0.214373$ to 0.385789 )
95\% confidence interval for difference between medians or means:
Median difference $=1.55218$ (CI: 0.86473 to 2.21303)
Mann-Whitney U test
Observations ( x ) in SGA -non placenta COD B:L ratio $=101$ median $=4.271914$ rank sum $=19,301$
Observations ( y ) in Non SGA UE deaths $=209$ median $=3.45077$
$\mathrm{U}=14,150 \quad \mathrm{U}^{\prime}=6,959$
Normalised statistic $=4.861115$
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y)
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.32967(95 \%$ CI: 0.270151 to 0.396541$)$
95\% confidence interval for difference between medians or means:
Median difference $=0.85527$ (CI: 0.51013 to 1.20767)

Mann-Whitney U test
Observations ( x ) in SGA placenta COD B:L ratio $=49$ median $=6.101583$ rank sum $=16,727$
Observations (y) in SGA and non SGA non placental B:L ratio $=389$ median $=3.587145$
$\mathrm{U}=15,502 \quad \mathrm{U}^{\prime}=3,559$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}<0.0001$ (H1: x tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.186716(95 \%$ CI: 0.132343 to 0.260058$)$
95\% confidence interval for difference between medians or means:
Median difference $=2.37658$ (CI: 1.83316 to 2.93634)

## Body:Thymus weight ratio

Mann-Whitney U test
Observations ( x ) in No Mac Body:Tyhymus weight ratio $=272$ median $=405.75$ rank sum $=108,053$
Observations (y) in Any Mac Body:Tyhymus weight ratio $=638$ median $=532.694915$
$\mathrm{U}=70,925 \quad \mathrm{U}^{\prime}=102,611$
Normalised statistic $=-4.364898$ (adjusted for ties)
Lower side $\mathrm{P}<0.0001$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}>0.9999$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.591295(95 \%$ CI: 0.550557 to 0.630565$)$

95\% confidence interval for difference between medians or means:
Median difference $=-95.06185(\mathrm{CI}:-140.2528$ to -52.0771$)$

## Mann-Whitney U test

Observations (x) in SGA Body:Tyhymus weight ratio $=174$ median $=638.890244$ rank sum $=$
53,667.5
Observations (y) in NON SGA Body:Tyhymus weight ratio $=298$ median $=355.144983$
$\mathrm{U}=38,442.5 \quad \mathrm{U}^{\prime}=13,409.5$
Normalised statistic $=8.755082$ (adjusted for ties)
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y)
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.258611(95 \%$ CI: 0.215825 to 0.307656$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=242.87845$ (CI: 184.825 to 313.8454)

## Mann-Whitney U test

Observations (x) in SGA Placental COD Body:Tyhymus weight ratio $=64$ median $=830.555556$ rank sum $=6,487$
Observations (y) in SGA non placental COD Body:Tyhymus weight ratio $=110$ median $=551.425502$
$\mathrm{U}=4,407 \quad \mathrm{U}^{\prime}=2,633$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0027$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9973$ (H1: x tends to be greater than y )

Two sided $\mathrm{P}=0.0054$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.374006$ ( $95 \%$ CI: 0.29425 to 0.462912 )
95\% confidence interval for difference between medians or means:
Median difference $=208.66465$ (CI: 70.0966 to 386.9472)
Mann-Whitney U test
Observations (x) in SGA Placental COD Body:Tyhymus weight ratio $=64$ median $=830.555556$ rank sum $=21,376.5$
Observations (y) in SGA non placental and non SGA all other COD Body:Thymus weight ratio $=408$
median $=394.707273$
$\mathrm{U}=19,296.5 \quad \mathrm{U}^{\prime}=6,815.5$
Normalised statistic $=6.151194($ adjusted for ties $)$
Lower side $\mathrm{P}>0.9999$ (H1: x tends to be less than y)
Upper side $\mathrm{P}<0.0001$ (H1: x tends to be greater than y)
Two sided $\mathrm{P}<0.0001$ (H1: x tends to be distributed differently to y )
Theta $\left(U^{\prime} / \mathrm{mn}\right)=0.26101(95 \%$ CI: 0.202367 to 0.331809$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=369.4722$ (CI: 247.4765 to 530.805 )

## Chapter 7 The Placenta

Significant!
Mann-Whitney U test
Observations (x) in Black Placental weight $(\mathrm{g})=109$ median $=179$ rank sum $=21,488$

Observations (y) in White Placental weight $(\mathrm{g})=337$ median $=243$
$\mathrm{U}=15,493 \quad \mathrm{U}^{\prime}=21,240$
Normalised statistic $=-2.45653($ adjusted for ties $)$
Lower side $\mathrm{P}=0.007$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.993$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.014$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.578227(95 \%$ CI: 0.515851 to 0.637718$)$
95\% confidence interval for difference between medians or means:
Median difference $=-39$ (CI: -73 to -7.6 )

Mann-Whitney U test
Observations ( x ) in Asian Placental weight $(\mathrm{g})=44$ median $=217.5$ rank sum $=3,735$
Observations (y) in Black Placental weight $(\mathrm{g})=109$ median $=179$
$\mathrm{U}=2,745 \quad \mathrm{U}^{\prime}=2,051$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0814$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9186$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.1628$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.427648(95 \%$ CI: 0.333247 to 0.528829$)$
95\% confidence interval for difference between medians or means:
Median difference $=31.5$ (CI: -11 to 79.6)
Mann-Whitney U test

Observations ( x ) in White Placental weight $(\mathrm{g})=337$ median $=243 \mathrm{rank}$ sum $=59,476.5$
Observations (y) in Mixed/Oriental Placental weight $(\mathrm{g})=12$ median $=200.95$
$\mathrm{U}=2,523.5 \quad \mathrm{U}^{\prime}=1,520.5$
Normalised statistic $=1.460238($ adjusted for ties $)$
Lower side $\mathrm{P}=0.9279$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.0721(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.1442$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $(\mathrm{U} / \mathrm{mn})=0.375989$ ( $95 \%$ CI: 0.238579 to 0.541732 )
95\% confidence interval for difference between medians or means:
Median difference $=60.75$ (CI: -21 to 148.3)

## Mann-Whitney U test

Observations ( x ) in Black Placental weight $(\mathrm{g})=109$ median $=179$ rank sum $=6,684$
Observations (y) in Mixed/Oriental Placental weight $(\mathrm{g})=12$ median $=200.95$
$\mathrm{U}=689$

$$
\mathrm{U}^{\prime}=619
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3831$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.6169(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.7662$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.473242(95 \% \mathrm{CI}: 0.315125$ to 0.637944$)$
$\mathbf{9 5 \%}$ confidence interval for difference between medians or means:

## Median difference $=8.3(\mathrm{CI}:-45$ to 72.2 $)$

Table Analyzed Data 1
Chi-square
Chi-square, df 6.364, 1
z 2.523
P value 0.0116
P value summary *
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Study population Reference population Total
Central Cord $252 \quad 239491$
$\begin{array}{llll}\text { Other cord insertion } & 499 & 622 & 1121\end{array}$
$\begin{array}{llll}\text { Total } & 751 & 861 & 1612\end{array}$
Table Analyzed Data 2
Chi-square
Chi-square, df 20.04, 1
Z 4.477
P value $<0.0001$
P value summary ****
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes

| Data analyzed Study population | Reference population Total |  |  |
| :--- | :--- | :--- | :--- |
| Eccentric cord 398 551 | 949 |  |  |
| All other cord insertions | 353 | 310 | 663 |

## Total 7518611612

Table Analyzed Data 3

Chi-square
Chi-square, df 33.89, 1
Z 5.822
P value< 0.0001
P value summary $\quad * * * *$
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes
Data analyzed Study population Reference population Total
Vellementous cord 34236
all other cord insertions $717 \quad 859 \quad 1576$
Total $751 \quad 861 \quad 1612$

Table Analyzed Data 1
Chi-square
Chi-square, df 32.36, 1
Z $\quad 5.689$
P value <0.0001
P value summary $\quad * * * *$
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) Yes

Data analyzed Miscarriages stillbirth Total
Plac abnoormal cord and membranes N $\quad 164 \quad 172$
Place, cord and mem normal $69 \quad 196 \quad 265$

Total 233368601


Mann-Whitney U test
Observations (x) in Mums Age in cases of $\mathrm{AI}=174$ median $=31$ rank sum $=87,789$
Observations (y) in Mums Age in all other cases $=866$ median $=31$
$\mathrm{U}=72,564 \quad \mathrm{U}^{\prime}=78,120$
Normalised statistic $=-0.769314$ (adjusted for ties)
Lower side $\mathrm{P}=0.2209$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7791$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.4417$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.518436(95 \%$ CI: 0.471502 to 0.564977$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0(\mathrm{CI}:-1$ to 1$)$

Mann-Whitney U test
Observations ( x ) in Maternal BMI AI cases $=85$ median $=26.4$ rank sum $=19,038$
Observations (y) in Maternal BMIcases minus AI $=383$ median $=26.8$
$\mathrm{U}=15,383 \quad \mathrm{U}^{\prime}=17,172$
Normalised statistic $=-0.793129$ (adjusted for ties)
Lower side $\mathrm{P}=0.2139$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.7861$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.4277$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.527477(95 \%$ CI: 0.459834 to 0.593917$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-0.5($ CI: -2 to 0.9$)$

## Mann-Whitney U test

Observations (x) in Uteroplacental Insufficiency Mums Age $=41$ median $=29$ rank sum $=18,643.5$
Observations (y) in Mums Age all causes of death except placental $=987$ median $=31$
$\mathrm{U}=17,782.5 \quad \mathrm{U}^{\prime}=22,684.5$
Normalised statistic $=-1.317406$ (adjusted for ties)
Lower side $\mathrm{P}=0.0939$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.9061$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.1877$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.560568$ ( $95 \%$ CI: 0.470537 to 0.646029 )
$95 \%$ confidence interval for difference between medians or means:
Median difference $=-2($ CI: -4 to 1$)$
Mann-Whitney U test
Observations ( x ) in Maternal BMI Pacental COD $=16$ median $=26.1$ rank sum $=3,108.5$
Observations ( y ) in Maternal BMI ecept Placenta $=445$ median $=26.9$

## $\mathrm{U}=2,972.5 \quad \mathrm{U}^{\prime}=4,147.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1323$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.8677$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.2646$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.582514$ ( $95 \%$ CI: 0.439673 to 0.710593 )

95\% confidence interval for difference between medians or means:
Median difference $=-1.55(\mathrm{CI}:-4.5$ to 1.2$)$

Mann-Whitney U test
Observations (x) in UE lesion Mums Age $=91$ median $=30$ rank sum $=6,709$
Observations (y) in COD Placenta Mums Age $=54$ median $=30$
$\mathrm{U}=2,523 \quad \mathrm{U}^{\prime}=2,391$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3942$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.6058$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.7884$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.486569(95 \%$ CI: 0.391842 to 0.582472$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=0$ (CI: -2 to 3 )

Mann-Whitney U test
Observations ( x ) in UE lesion placenta Gestation $=91$ median $=32$ rank sum $=6,851.5$
Observations (y) in COD Placenta Gestation $=56$ median $=29$
$\mathrm{U}=2,665.5 \quad \mathrm{U}^{\prime}=2,430.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.3202$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.6798$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.6405$ (H1: x tends to be distributed differently to y )

Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.476943$ ( $95 \% \mathrm{CI}: 0.383722$ to 0.572138 )
$95 \%$ confidence interval for difference between medians or means
Median difference $=1(\mathrm{CI}:-2$ to 3$)$

## Mann-Whitney U test

Observations (x) in Unexplained Unexplaiend mums age $=284$ median $=32$ rank sum $=54,594$
Observations (y) in UE lesion Mums Age $=91$ median $=30$
$\mathrm{U}=14,124 \quad \mathrm{U}^{\prime}=11,720$

Normalised statistic $=1.337647$ (adjusted for ties)
Lower side $\mathrm{P}=0.9095$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.0905(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.181(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.45349(95 \%$ CI: 0.387374 to 0.521657$)$
$95 \%$ confidence interval for difference between medians or means:
Median difference $=1(\mathrm{CI}: 0$ to 2$)$

Mann-Whitney U test
Observations (x) in UE lesion placenta Gestation $=91$ median $=32$ rank sum $=19,412$
Observations (y) in Unexplained Unexplained fetal gestation $=283$ median $=26$
$\mathrm{U}=15,226 \quad \mathrm{U}^{\prime}=10,527$

Normalised statistic $=2.62274$ (adjusted for ties)
Lower side $\mathrm{P}=0.9956$ (H1: x tends to be less than y )

Upper side $\mathrm{P}=0.0044(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0087$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.408768(95 \%$ CI: 0.344578 to 0.476954$)$
$95 \%$ confidence interval for difference between medians or means
Median difference $=2$ (CI: 1 to 5)

## Chapter 9 Thymus Histology

Mann-Whitney U test- significant!

Observations (x) in SGA Ab Placenta Corticomedullary ratio $=13$ median $=1.631179$ rank sum $=151$
Observations (y) in Controls Corticomedullary ratio $=18$ median $=3.31558$
$\mathrm{U}=60 \quad \mathrm{U}^{\prime}=174$
Exact probability:
Lower side $\mathrm{P}=0.011$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.989(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.0221(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.74359(95 \%$ CI: 0.534975 to 0.873897$)$
$95.4 \%$ confidence interval for difference between medians or means:
Median difference $=-1.24191$ (CI: -2.39728 to -0.20602 )

Mann-Whitney U test- not signif
Observations ( x ) in Controls Corticomedullary ratio $=18$ median $=3.31558$ rank sum $=301$

Observations (y) in UE N Placenta Corticomedullary ratio $=11$ median $=2.427386$
$\mathrm{U}=130 \quad \mathrm{U}^{\prime}=68$
Exact probability:
Lower side $\mathrm{P}=0.0866$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.9134(\mathrm{H} 1$ : x tends to be greater than y$)$
Two sided $\mathrm{P}=0.1733$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.343434(95 \%$ CI: 0.181169 to 0.561655$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=0.887015$ (CI: -0.57642 to 2.19635)
Mann-Whitney U test- not signif

Observations ( x ) in UE N Placenta Corticomedullary ratio $=11$ median $=2.427386$ rank sum $=145$
Observations (y) in SGA Ab Placenta Corticomedullary ratio $=13$ median $=1.631179$
$\mathrm{U}=79 \quad \mathrm{U}^{\prime}=64$

Exact probability:
Lower side $\mathrm{P}=0.3453$ ( H 1 : x tends to be less than y )
Upper side $\mathrm{P}=0.6547(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.6905$ ( H 1 : x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.447552(95 \% \mathrm{CI}: 0.248394$ to 0.667886$)$
$95.3 \%$ confidence interval for difference between medians or means:
Median difference $=0.29962(\mathrm{CI}:-0.49101$ to 1.42708$)$

Mann-Whitney U test- not signif
Observations (x) in SGA Ab Placenta Number of $\mathrm{HC}(6$ fields at x 4$)=14$ median $=115.5$ rank sum $=$

## 245.5

Observations (y) in Controls Number of HC ( 6 fields at x 4$)=20$ median $=95$
$\mathrm{U}=140.5 \quad \mathrm{U}^{\prime}=139.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4966$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.5034$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.9931$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.498214$ ( $95 \% \mathrm{CI}: 0.315013$ to 0.681972 )
$95.3 \%$ confidence interval for difference between medians or means:
Median difference $=0.5$ (CI: -36 to 49)
Mann-Whitney U test- not signif
Observations ( x ) in Controls Number of HC ( 6 fields at x 4 ) $=20$ median $=95$ rank sum $=348.5$ Observations ( $y$ ) in UE N Placenta Number of HC ( 6 fields at $x 4$ ) $=12$ median $=94.5$
$\mathrm{U}=138.5 \quad \mathrm{U}^{\prime}=101.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2415(\mathrm{H} 1: x$ tends to be less than y$)$
Upper side $\mathrm{P}=0.7585(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.483$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.422917(95 \% \mathrm{CI}: 0.246874$ to 0.624788$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=15$ (CI: -21 to 51)
Mann-Whitney U test- not significant

Observations ( x ) in UE N Placenta Number of HC ( 6 fields at x 4$)=12$ median $=94.5$ rank sum $=148$
Observations (y) in SGA Ab Placenta Number of HC ( 6 fields at x 4$)=14$ median $=115.5$
$\mathrm{U}=70$

$$
\mathrm{U}^{\prime}=98
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.243$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.757$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.486$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.583333$ ( $95 \% \mathrm{CI}: 0.366328$ to 0.768848 )
$95.4 \%$ confidence interval for difference between medians or means:
Median difference $=-18$ (CI: -78 to 31)

Mann-Whitney U test= not significant
Observations (x) in SGA Ab placenta Distance between lobules (6 fields at $x 4)($ Micro meters $)=14$
median $=86.258333$ rank sum $=230$
Observations (y) in Controls Distance between lobules (6 fields at x 4$)($ Micro meters $)=20$ median $=$ 98.3
$\mathrm{U}=125 \quad \mathrm{U}^{\prime}=155$
Exact probability:
Lower side $\mathrm{P}=0.3082(\mathrm{H} 1$ : x tends to be less than y$)$
Upper side $\mathrm{P}=0.6918$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.6165$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.553571(95 \%$ CI: 0.362713 to 0.727765$)$
$95.3 \%$ confidence interval for difference between medians or means:
Median difference $=-5.01667(\mathrm{CI}:-22.46666$ to 13.55$)$

Mann-Whitney U test- not significant
Observations (x) in Controls Distance between lobules (6 fields at $x 4)($ Micro meters $)=20$ median $=$ 98.3 rank sum $=340.5$

Observations (y) in UE N Placenta Distance between lobules (6 fields at x4) (Micro meters) = 12 median $=88.658333$
$\mathrm{U}=130.5 \quad \mathrm{U}^{\prime}=109.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.347$ (H1: x tends to be less than y )
Upper side $\mathrm{P}=0.653(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.6939$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.45625(95 \%$ CI: 0.273275 to 0.653922$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=5.225(\mathrm{CI}:-20.98333$ to 23.48333 $)$

Mann-Whitney U test- not significant
Observations (x) in UE N Placenta Distance between lobules (6 fields at $x 4$ ) (Micro meters) $=12$ median $=88.658333$ rank sum $=163$
Observations (y) in SGA Ab placenta Distance between lobules (6 fields at x4) (Micro meters) $=14$
median $=86.258333$
$\mathrm{U}=85 \quad \mathrm{U}^{\prime}=83$
Exact probability:
Lower side $\mathrm{P}=0.4899$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.5101$ (H1: x tends to be greater than y )

Two sided $\mathrm{P}=0.9798(\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y$)$
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.494048(95 \%$ CI: 0.291525 to 0.698829$)$
95.4\% confidence interval for difference between medians or means:

Median difference $=1.18333$ (CI: -22.38333 to 22.46666)
Mann-Whitney U test- not significant
Observations (x) in SGA Ab Placenta Number of tingible body macrophages ( 1 xHPF ) = 13 median $=36$ rank sum $=222.5$
Observations (y) in Controls Number of tingible body macrophages ( 1 xHPF ) $=20$ median $=41$
$\mathrm{U}=131.5 \quad \mathrm{U}^{\prime}=128.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.4819$ (H1: x tends to be less than y$)$
Upper side $\mathrm{P}=0.5181$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.9638$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.494231(95 \%$ CI: 0.308172 to 0.682154$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=1(\mathrm{CI}:-10$ to 15)

Mann-Whitney U test - not significant
Observations (x) in Controls Number of tingible body macrophages ( 1 xHPF ) $=20$ median $=41$ rank sum $=357$
Observations (y) in UE N Placenta Number of tingible body macrophages $(1 \mathrm{xHPF})=12$ median $=35$

$$
\mathrm{U}=147 \quad \mathrm{U}^{\prime}=93
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1511$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.8489$ (H1: x tends to be greater than y )
Two sided $\mathrm{P}=0.3021$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.3875(95 \% \mathrm{CI}: 0.219607$ to 0.592923$)$
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=5.5$ (CI: -4 to 14)
Mann-Whitney U test- not significant
Observations (x) in UE N Placenta Number of tingible body macrophages $(1 x H P F)=12$ median $=35$ rank sum $=137.5$
Observations (y) in SGA Ab Placenta Number of tingible body macrophages ( 1 xHPF ) = 13 median $=36$
$\mathrm{U}=59.5$

$$
U^{\prime}=96.5
$$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1633$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.8367(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.3266$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.61859(95 \%$ CI: 0.393875 to 0.797418$)$
95.4\% confidence interval for difference between medians or means:

Median difference $=-6$ (CI: -24 to 6 )
Mann-Whitney U test - not different
Observations (x) in Control Gestation $=20$ median $=36$ rank sum $=345.5$
Observations (y) in SGA Normal Placenta Gestation $=12$ median $=29.5$
$\mathrm{U}=135.5 \quad \mathrm{U}^{\prime}=104.5$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.2783(\mathrm{H} 1: \mathrm{x}$ tends to be less than y$)$
Upper side $\mathrm{P}=0.7217$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be greater than y )
Two sided $\mathrm{P}=0.5566$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.435417$ ( $95 \%$ CI: 0.25669 to 0.635808 )
$95.2 \%$ confidence interval for difference between medians or means:
Median difference $=1$ (CI: -2 to 9$)$
Mann-Whitney U test- not different
Observations (x) in SGA Normal Placenta Gestation $=12$ median $=29.5$ rank sum $=197.5$
Observations ( y ) in SGA Ab placenta Gestation $=16$ median $=28$
$\mathrm{U}=119.5 \quad \mathrm{U}^{\prime}=72.5$
Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.1415$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.8585(\mathrm{H} 1: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.2829$ (H1: x tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.377604$ ( $95 \% \mathrm{CI}: 0.206172$ to 0.592917 )
$95.3 \%$ confidence interval for difference between medians or means:
Median difference $=2$ (CI: -2 to 9 )
Mann-Whitney U test- significantly different
Observations ( x ) in SGA Ab placenta Gestation $=16$ median $=28$ rank sum $=214$
Observations (y) in Control Gestation $=20$ median $=36$
$\mathrm{U}=78 \quad \mathrm{U}^{\prime}=242$

Exact probability (adjusted for ties):
Lower side $\mathrm{P}=0.0039$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be less than y )
Upper side $\mathrm{P}=0.9961(\mathrm{H}: \mathrm{x}$ tends to be greater than y$)$
Two sided $\mathrm{P}=0.0078$ ( $\mathrm{H} 1: \mathrm{x}$ tends to be distributed differently to y )
Theta $\left(\mathrm{U}^{\prime} / \mathrm{mn}\right)=0.75625(95 \%$ CI: 0.565876 to 0.875312$)$
$95.1 \%$ confidence interval for difference between medians or means:
Median difference $=-6(\mathrm{CI}:-9$ to -1$)$
Table Analyzed Data 1
Chi-square
Chi-square, df 0.9207, 1
z 0.9595
P value 0.3373
$P$ value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No
Data analyzed Expected Obseverd Total
Low Grade $10 \quad 13 \quad 23$
High Grade $10 \quad 7 \quad 17$
$\begin{array}{llll}\text { Total } & 20 & 20 & 40\end{array}$
Table Analyzed Data 2
Chi-square
Chi-square, df 0.8292, 1
z 0.9106
P value 0.3625


Table Analyzed Data 1

Fisher's exact test
$P$ value 1
$P$ value summary ns
One- or two-tailed Two-tailed

## Statistically significant? (alpha<0.05)

Data analyzed Control SGA ab place Total
Low Grade $13 \quad 9 \quad 22$
High Grade $7 \quad 5 \quad 12$

Total $20 \quad 1434$

Table Analyzed Data 2
Fisher's exact test
P value 0.4224
P value summary ns
One- or two-tailed Two-tailed
Statistically significant? (alpha<0.05) No

| Data analyzed Control | SGA normal plac | Total |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Low Grade | 13 | 10 | 23 |  |
| High Grade | 7 | 2 | 9 |  |
| Total 20 | 12 | 32 |  |  |

Table Analyzed Data 3
Fisher's exact test
$P$ value 0.3913
$P$ value summary ns

| One- or two-tailed Two-tailed |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Statistically significant? (alpha<0.05) No |  |  |  |  |  |
| Data analyzed |  | GA ab place | SGA no |  | Total |
| Low Grade | 9 | 10 | 19 |  |  |
| High Grade | 5 | 2 | 7 |  |  |
| Total 14 | 12 | 26 |  |  |  |

Appendix 4: 'Other' causes of death stated within the post-mortem data that were reclassified and the number of incidences recorded

In the Early miscarriage category the "other" causes of death were:

- Disconcordant placental share (x 2)
- Chorionic Haemosiderosis indicating premature separation of the placenta (x 2 )
- Plasma cell deciduitis (x1)
- Massive perivillous fibrin deposition (x1)
- Cervical incompetence (x2)
- Placental Insufficiency ( x 1)
- Placental calcifications suggesting chromosomal abnormalities (x2)
- Retroplacental Haemorrhage (x 3)
- Vasculitis and chroioamnionitis (x1)
- Hydropic growth restriction with Epstein abnormality and fetal and placental
hydrops (x1)
- Lymphoplasmocytic inflammation of decidua (x2)
- TTTS (x2)
- Hydrops and trisomy 21 (x1)
- Placental Infarction (x1)
- Subchorionic thrombus in placenta (x1)
- Vasculitis of unknown aetiology (x1)
- Triploidy (x1)
- Subchorionic haemorrhage (x1)
- Evidence of bleeding into amniotic fluid, lungs and stomach (x1)

In the late miscarriage category, the "other" causes of death were;

- Placental calcifications indicating placental chromosomal abnormalities ( x 2)
- Cervical incompetence (x 2)
- Amniotic band over umbilical cord ( x 1 )
- Pregnancy induced hypertension and IUGR (x1)
- Twin to Twin Transfusion Syndrome (TTTS) (x 1)
- Complications post laser ablation for TTTS ( x 1 )
- Massive Histiocytic intervillositis (x1)
- Mosaicism for dicondric triploidy ( x 1 )
- Retroplacental haematoma ( x 2 )
- Intervillous placental haemorrhage ( x 1 )
- Placental Infraction ( x 2)
- Diabetes Mellitus and IUGR ( x 1)

In the stillbirth category the "other" causes of death were:

- Vascular Necrosis of the cord (x1)
- Thrombosis of fetal chorionic vessels with renal and hepatic thrombi (x1)
- Uteroplacental vasculopathy ( x 6 )
- Congenital malformation (x1)
- Infarction of the placenta (x29)
- Fetal thrombotic vasculopathy (x20)
- Vascular under perfusion of the placenta (x2)
- Hypercoiled coil found around neck of fetus at delivery (x 1)
- Cervical incompetence (x1)
- Long nuchal cord and maternal raised BP (x 1)
- Feto-maternal haemorrhage ( x 9 )
- Placental insufficiency (x4)
- Cord around neck at delivery ( x 1 )
- Maternal Diabetes mellitus (x 2)
- Maternal Gestational DM (x1)
- Maternal DM and PET ( x 2)
- Abnormality of placentation ( x 4)
- Cerebral haemorrhage (x 1)
- Thrombosis of fetal vellamentous vessels (x1)
- Umbilical cord haematoma (x1)
- Umbilical and renal vein thrombosis (x1)
- Massive perivillous fibrin deposition (x 4)
- Tightening of umbilical cord true knot (x 5)
- Abnormal villous tissue (x 1)
- Acute thrombosis of umbilical vein (x1)
- Placental vasculitis (x1)
- Retroplacental Haemorrhage ( x 3)
- Massive thymic Haemorrhage (x1)
- Maternal HELLP syndrome (x1)
- Cholestasis of pregnancy (x1)
- Maternal events (i.e. events in labour ) (x1)
- Fetal vascular thrombosis (x1)
- Furcate cord with thrombus formation (x1)
- Fetal thrombophilia (x1)
- Thrombus in large fetal vessel of placenta (x1)
- Thrombosis of vessels in cord (x1)
- Stem vessel thrombosis (x1)
- Chronic Histiocytic intervillositis (x2)
- Thrombus in vessels of vellamentous cord (x1)
- Underperfusion of placental (x1)
- True cord knot thrombosis (x1)
- Stricture of cord with thrombosis (x1)
- Viral intrauterine infection (x1)
- Chronic villitis (x8)
- Hydrops (x1)
- Entaglement of umbilical cord (x1)
- TTTS (x6)
- Intestinal perforation (x1)
- TRAP syndrome (x1)


## Appendix 5: Delta male birthweight calculations:

| Gestation | Birth Weight | WHO expected BW (50th centile) | $\begin{array}{\|l} \text { Obs- } \\ \exp \end{array}$ | SD (g) | Delat $=$ (obsExp)/SD in grams | $\begin{aligned} & \mathrm{SGA}= \\ & \text { when } \\ & \text { delat } \\ & \text { value < } \\ & -1.375 \end{aligned}$ | Review opinion - final cause of death | Sex |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23 | 31 | 600 | -569 | 82.44023083 | -6.90197 | Y | Unexplained, obese | M |
| 25 | 181 | 800 | -619 | 115.4163232 | -5.363192857 | Y | Unexplained lesion, placenta | M |
| 25 | 200 | 800 | -600 | 115.4163232 | -5.198571429 | Y | Known IUGR | M |
| 24 | 210 | 700 | -490 | 98.928277 | -4.953083333 | Y | Abruption | M |
| 23 | 220 | 600 | -380 | 82.44023083 | -4.6094 | Y | Unexplained lesion, baby | M |

Appendices

| 26 | 265 | 925 | -660 | 148.3924155 | -4.447666667 | Y | Unexplained, unexplained | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | 270 | 925 | -655 | 148.3924155 | -4.413972222 | Y | Placenta | M |
| 24 | 280 | 700 | -420 | 98.928277 | -4.2455 | Y | Unexplained lesion, baby | M |
| 24 | 284 | 700 | -416 | 98.928277 | -4.205066667 | Y | Pre-eclampsia | M |
| 23 | 290 | 600 | -310 | 82.44023083 | -3.7603 | Y | Congenital abnormalities | M |
| 35 | 296 | 2475 | -2179 | 362.7370157 | -6.007106818 | Y | Congenital abnormalities | M |
| 24 | 300 | 700 | -400 | 98.928277 | -4.043333333 | Y | Placenta | M |
| 23 | 300 | 600 | -300 | 82.44023083 | -3.639 | Y | Unexplained obese | M |

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| 27 | 310 | 1025 | -715 | 148.3924155 | -4.818305556 | Y | Unexplained lesion, placenta | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | 320 | 1150 | -830 | 181.3685078 | -4.576318182 | Y | Known IUGR | M |
| 24 | 360 | 700 | -340 | 98.928277 | -3.436833333 | Y | Unexplained, obese | M |
| 24 | 395 | 700 | -305 | 98.928277 | -3.083041667 | Y | Unexplained, unexplained | M |
| 23 | 400 | 600 | -200 | 82.44023083 | -2.426 | Y | Congenital abnormalities | M |
| 24 | 410 | 700 | -290 | 98.928277 | -2.931416667 | Y | Ascending infection | M |
| 26 | 420 | 925 | -505 | 148.3924155 | -3.403138889 | Y | Placenta | M |
| 28 | 424 | 1150 | -726 | 181.3685078 | -4.0029 | Y | Placenta | M |

Appendices

| 28 | 430 | 1150 | -720 | 181.3685078 | -3.969818182 | Y | Congenital abnormalities | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | 435 | 800 | -365 | 115.4163232 | -3.162464286 | Y | Infection | M |
| 25 | 438 | 800 | -362 | 115.4163232 | -3.136471429 | Y | Unexplained, unexplained | M |
| 29 | 440 | 1275 | -835 | 197.856554 | -4.220229167 | Y | Placenta | M |
| 26 | 450 | 925 | -475 | 148.3924155 | -3.200972222 | Y | Unexplained previous SB | M |
| 24 | 454 | 700 | -246 | 98.928277 | -2.48665 | Y | Unexplained lesion, placenta | M |
| 25 | 455 | 800 | -345 | 115.4163232 | -2.989178571 | Y | Known IUGR | M |
| 23 | 458 | 600 | -142 | 82.44023083 | -1.72246 | Y | Ascending infection | M |
| 27 | 484 | 1025 | -541 | 148.3924155 | -3.645738889 | Y | Placenta | M |

Appendices


Appendices

| 24 |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | :--- | :--- | :--- | :--- | :--- |

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| 28 | 605 | 1150 | -545 | 181.3685078 | -3.004931818 | Y | Placenta | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | 610 | 1425 | -815 | 230.8326463 | -3.530696429 | Y | Twin complication | M |
| 29 | 620 | 1275 | -655 | 197.856554 | -3.310479167 | Y | Congenital abnormalities | M |
| 25 | 630 | 800 | -170 | 115.4163232 | -1.472928571 | Y | Unexplained, unexplained | M |
| 25 | 632 | 800 | -168 | 115.4163232 | -1.4556 | Y | Pre-eclampsia | M |
| 24 | 641 | 700 | -59 | 98.928277 | -0.596391667 | N | Placenta | M |
| 26 | 650 | 925 | -275 | 148.3924155 | -1.853194444 | Y | Twin complication | M |

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| 25 | 660 | 800 | -140 | 115.4163232 | -1.213 | N | Unexplained, previous SB | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | 670 | 800 | -130 | 115.4163232 | -1.126357143 | N | Unexplained, unexplained | M |
| 24 | 680 | 700 | -20 | 98.928277 | -0.202166667 | N | Unexplained, unexplained | M |
| 25 | 682 | 800 | -118 | 115.4163232 | -1.022385714 | N | Ascending infection | M |
| 27 | 695 | 1025 | -330 | 148.3924155 | -2.223833333 | Y | Unexplained, unexplained | M |
| 28 | 700 | 1150 | -450 | 181.3685078 | -2.481136364 | Y | Abruption | M |
| 25 | 710 | 800 | -90 | 115.4163232 | -0.779785714 | N | Unexplained, unexplained | M |

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| 29 | 720 | 1275 | -555 | 197.856554 | -2.8050625 | Y | Placenta | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31 | 720 | 1600 | -880 | 263.8087387 | -3.33575 | Y | Placenta | M |
| 24 | 725 | 700 | 25 | 98.928277 | 0.252708333 | N | Unexplained lesion, placenta | M |
| 29 | 730 | 1275 | -545 | 197.856554 | -2.754520833 | Y | Placenta | M |
| 26 | 732 | 925 | -193 | 148.3924155 | -1.300605556 | N | Unexplaine dlesion, clinical | M |
| 28 | 740 | 1150 | -410 | 181.3685078 | -2.260590909 | Y | Placenta | M |
| 26 | 740 | 925 | -185 | 148.3924155 | -1.246694444 | N | Unexplained, unexplained | M |
| 24 | 740 | 700 | 40 | 98.928277 | 0.404333333 | N | Abruption | M |
| 27 | 750 | 1025 | -275 | 148.3924155 | -1.853194444 | Y | Unexplained unexplained | M |

Appendices

| 24 |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | :--- | :--- | :--- |

Appendices

| 31 | 850 | 1600 | -750 | 263.8087387 | -2.84296875 | Y | Unexplaiend lesion, placenta | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | 858 | 1025 | -167 | 148.3924155 | -1.125394444 | N | Unexplained obese | M |
| 25 | 870 | 800 | 70 | 115.4163232 | 0.6065 | N | Ascending infection | M |
| 31 | 880 | 1600 | -720 | 263.8087387 | -2.72925 | Y | Placenta | M |
| 25 | 880 | 800 | 80 | 115.4163232 | 0.693142857 | N | Unexplained, unexplained | M |
| 26 | 890 | 925 | -35 | 148.3924155 | -0.235861111 | N | Pre-eclampsia | M |
| 27 | 900 | 1025 | -125 | 148.3924155 | -0.842361111 | N | Unexplained lesion, clinical | M |

Appendices

| 27 | 920 | 1025 | -105 | 148.3924155 | -0.707583333 | N | Unexplained, unexplained | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 928 | 1275 | -347 | 197.856554 | -1.753795833 | Y | Unexplained, unexplained | M |
| 28 | 930 | 1150 | -220 | 181.3685078 | -1.213 | N | Unexplained, unexplained | M |
| 29 | 940 | 1275 | -335 | 197.856554 | -1.693145833 | Y | Pre-eclampsia | M |
| 28 | 940 | 1150 | -210 | 181.3685078 | -1.157863636 | N | Unexplained, previous SB | M |
| 27 | 950 | 1025 | -75 | 148.3924155 | -0.505416667 | N | Unexplained, unexplained | M |
| 29 | 965 | 1275 | -310 | 197.856554 | -1.566791667 | Y | Unexplained lesion, baby | M |
| 32 | 990 | 1800 | -810 | 296.784831 | -2.72925 | Y | Placenta | M |

Appendices

| 31 | 996 | 1600 | -604 | 263.8087387 | -2.2895375 | Y | Known IUGR | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27 | 1002 | 1025 | -23 | 148.3924155 | -0.154994444 | N | Unexplained, unexplained | M |
| 31 | 1020 | 1600 | -580 | 263.8087387 | -2.1985625 | Y | Congenital abnormalities | M |
| 27 | 1030 | 1025 | 5 | 148.3924155 | 0.033694444 | N | Infection | M |
| 27 | 1030 | 1025 | 5 | 148.3924155 | 0.033694444 | N | Unexplained lesion, placenta | M |
| 30 | 1060 | 1425 | -365 | 230.8326463 | -1.581232143 | Y | Unexplained, unexplained | M |
| 28 | 1080 | 1150 | -70 | 181.3685078 | -0.385954545 | N | Unexplained, unexplained | M |

Appendices

| 31 | 1110 | 1600 | -490 | 263.8087387 | -1.85740625 | Y | Unexplained, unexplained | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30 | 1110 | 1425 | -315 | 230.8326463 | -1.364625 | N | Unexplained, previous SB | M |
| 30 | 1110 | 1425 | -315 | 230.8326463 | -1.364625 | N | Congenital Abnormalities | M |
| 29 | 1114 | 1275 | -161 | 197.856554 | -0.813720833 | N | Unexplained lesion, clinical | M |
| 29 | 1120 | 1275 | -155 | 197.856554 | -0.783395833 | N | Placenta | M |
| 36 | 1140 | 2700 | -1560 | 362.7370157 | -4.300636364 | Y | Congenital abnormalities | M |
| 28 | 1140 | 1150 | -10 | 181.3685078 | -0.055136364 | N | Ascending infection | M |

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| 27 | 1140 | 1025 | 115 | 148.3924155 | 0.774972222 | N | Ascedning infection | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34 | 1170 | 2250 | -1080 | 346.2489695 | -3.119142857 | Y | Unexplained lesion, placenta | M |
| 29 | 1185 | 1275 | -90 | 197.856554 | -0.454875 | N | Unexplained lesion, placenta | M |
| 28 | 1188 | 1150 | 38 | 181.3685078 | 0.209518182 | N | Ascending infection | M |
| 31 | 1200 | 1600 | -400 | 263.8087387 | -1.51625 | Y | Unexplained lesion, postterm | M |
| 31 | 1204 | 1600 | -396 | 263.8087387 | -1.5010875 | Y | Unexplained, unexplained | M |
| 30 | 1230 | 1425 | -195 | 230.8326463 | -0.844767857 | N | Unexplained lesion, cord | M |

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| 29 | 1244 | 1275 | -31 | 197.856554 | -0.156679167 | N | Congenital abnormalities | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | 1245 | 1150 | 95 | 181.3685078 | 0.523795455 | N | Ascending infection | M |
| 31 | 1288 | 1600 | -312 | 263.8087387 | -1.182675 | N | Unexplained, unexplained | M |
| 33 | 1300 | 2000 | -700 | 296.784831 | $-2.358611111$ | Y | Placenta | M |
| 35 | 1310 | 2475 | -1165 | 362.7370157 | -3.211693182 | Y | Placenta | M |
| 35 | 1310 | 2475 | -1165 | 362.7370157 | -3.211693182 | Y | Abruption | M |
| 32 | 1336 | 1800 | -464 | 296.784831 | $-1.563422222$ | Y | Abruption | M |

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Appendices

| 29 | 1495 | 1275 | 220 | 197.856554 | 1.111916667 | N | Unexplained with IDDM | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 29 | 1500 | 1275 | 225 | 197.856554 | 1.1371875 | N | Congenital abnormalities | M |
| 38 | 1504 | 3175 | -1671 | 395.713108 | -4.22275625 | Y | Unexplained lesion, placenta | M |
| 34 | 1516 | 2250 | -734 | 346.2489695 | -2.119861905 | Y | Unexplained, obese | M |
| 32 | 1520 | 1800 | -280 | 296.784831 | -0.943444444 | N | Unexplained lesion, baby | M |
| 34 | 1550 | 2250 | -700 | 346.2489695 | -2.021666667 | Y | Abruption | M |

Appendices

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| 32 |  |  |  |  |  |  |  |  |

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| 31 |  |  |  |  |  |  |  |  |

Appendices

| 33 | 1920 | 2000 | -80 | 296.784831 | -0.269555556 | N | Twin complication | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 32 | 1930 | 1800 | 130 | 296.784831 | 0.438027778 | N | Unexplained, previous SB | M |
| 32 | 1950 | 1800 | 150 | 296.784831 | 0.505416667 | N | Unexplained lesion, placenta | M |
| 31 | 1980 | 1600 | 380 | 263.8087387 | 1.4404375 | N | Unexplained with GDM | M |
| 31 | 1984 | 1600 | 384 | 263.8087387 | 1.4556 | N | Unexplained unexplained | M |
| 34 | 2015 | 2250 | -235 | 346.2489695 | -0.678702381 | N | Unexplained lesion, placenta | M |
| 36 | 2070 | 2700 | -630 | 362.7370157 | -1.736795455 | Y | Unexplained with GDM | M |
| 32 | 2092 | 1800 | 292 | 296.784831 | 0.983877778 | N | Ascending infection | M |

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| 34 | 2100 | 2250 | -150 | 346.2489695 | -0.433214286 | N | Unexplained, previous SB | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36 | 2155 | 2700 | -545 | 362.7370157 | -1.502465909 | Y | Unexplained, unexplained | M |
| 32 | 2180 | 1800 | 380 | 296.784831 | 1.280388889 | N | Unexplained, unexplained | M |
| 36 | 2242 | 2700 | -458 | 362.7370157 | -1.262622727 | N | Unexplained with GDM and obese | M |
| 31 | 2254 | 1600 | 654 | 263.8087387 | 2.47906875 | N | Congenital abnormalities | M |
| 40 | 2270 | 3550 | -1280 | 395.713108 | -3.234666667 | Y | Ascending infection | M |
| 35 | 2300 | 2475 | -175 | 362.7370157 | -0.482443182 | N | Congenital abnormalities | M |
| 38 | 2360 | 3175 | -815 | 395.713108 | -2.059572917 | Y | Unexplained lesion, placenta | M |

Appendices

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| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 40 | 2380 | 3550 | -1170 | 395.713108 | -2.9566875 | Y | Unexplained, <br> unexplained | M |
| 36 | 2390 |  |  |  |  |  |  |  |

Appendices

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| ---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 35 | 2580 | 2475 | 105 | 362.7370157 | 0.289465909 | N | Unexplained, <br> unexplained | M |
| 36 | 2583 |  |  |  |  |  |  |  |

Appendices


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| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 40 | 2770 | 3550 | -780 | 395.713108 | -1.971125 | Y | Unexplained, <br> unexplained | M |
| 41 | 2800 |  |  |  |  |  |  |  |

Appendices

| 38 | 2860 | 3175 | -315 | 395.713108 | -0.79603125 | N | Pre-eclampsia | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 37 | 2888 | 2950 | -62 | 379.2250618 | -0.163491304 | N | Unexplained, unexplained | M |
| 40 | 2905 | 3550 | -645 | 395.713108 | -1.62996875 | Y | Unexplained, unexplained | M |
| 41 | 2910 | 3700 | -790 | 389.1178895 | -2.030233051 | Y | Unexplained obese with previous SB | M |
| 35 | 2926 | 2475 | 451 | 362.7370157 | 1.243325 | N | Unexplained with GDM | M |
| 40 | 2940 | 3550 | -610 | 395.713108 | -1.541520833 | Y | Unexplained, unexplained | M |
| 37 | 2950 | 2950 | 0 | 379.2250618 |  | N | Unexplained lesion, clinical | M |

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| ---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 38 | 2976 | 3175 | -199 | 395.713108 | -0.502889583 | N | Unexplained, <br> previous SB | M |
| 39 | 2980 |  |  |  |  |  |  |  |

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| ---: | :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 41 | 3030 | 3700 | -670 | 389.1178895 | -1.72184322 | Y | Unexplained, <br> previous SB | M |
| 39 | 3040 |  |  |  |  |  |  |  |

Appendices

| 39 | 3150 | 3375 | -225 | 395.713108 | -0.56859375 | N | Unexplained, unexplained | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | 3158 | 3550 | -392 | 395.713108 | -0.990616667 | N | Unexplained, unexplained | M |
| 40 | 3160 | 3550 | -390 | 395.713108 | -0.9855625 | N | Unexplained, unexplained | M |
| 41 | 3180 | 3700 | -520 | 389.1178895 | -1.336355932 | N | Unexplained, post term | M |
| 40 | 3180 | 3550 | -370 | 395.713108 | -0.935020833 | N | Placenta | M |
| 36 | 3184 | 2700 | 484 | 362.7370157 | 1.3343 | N | Unexplained lesion, placenta | M |
| 41 | 3190 | 3700 | -510 | 389.1178895 | -1.31065678 | N | Ascending infection | M |

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| 39 | 3190 | 3375 | -185 | 395.713108 | -0.467510417 | N | Unexplained, previous SB | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 | 3200 | 3700 | -500 | 389.1178895 | -1.284957627 | N | Unexplained lesion, placenta | M |
| 39 | 3200 | 3375 | -175 | 395.713108 | -0.442239583 | N | Unexplained lesion, placenta | M |
| 36 | 3200 | 2700 | 500 | 362.7370157 | 1.378409091 | N | Unexplained, unexplained | M |
| 30 | 3200 | 1425 | 1775 | 230.8326463 | 7.689553571 | N | Unexplained, unexplained | M |
| 39 | 3246 | 3375 | -129 | 395.713108 | -0.32599375 | N | Ascending infection | M |
| 40 | 3260 | 3550 | -290 | 395.713108 | -0.732854167 | N | Unexplained, unexplained | M |

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| ---: | :---: | :---: | :---: | :---: | :---: | :--- | :--- | :--- |
| 40 | 3410 | 3550 | -140 | 395.713108 | -0.353791667 | N | Unexplained <br> lesion, placenta | M |
| 38 | 3430 |  |  |  |  |  |  |  |

Appendices


Appendices

| 40 | 3590 | 3550 | 40 | 395.713108 | 0.101083333 | N | Unexplained unexplained | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 39 | 3600 | 3375 | 225 | 395.713108 | 0.56859375 | N | Unexplained, unexplained | M |
| 39 | 3600 | 3375 | 225 | 395.713108 | 0.56859375 | N | Unexplained lesion, cord | M |
| 40 | 3610 | 3550 | 60 | 395.713108 | 0.151625 | N | Infection | M |
| 42 | 3632 | 3850 | -218 | 395.713108 | -0.550904167 | N | Unexplained, post-term and obese | M |
| 41 | 3705 | 3700 | 5 | 389.1178895 | 0.012849576 | N | Unexpalined, post-term | M |
| 41 | 3710 | 3700 | 10 | 389.1178895 | 0.025699153 | N | Unexplained, previous SB | M |
| 40 | 3710 | 3550 | 160 | 395.713108 | 0.404333333 | N | Unexplained, unexplained | M |
| 42 | 3740 | 3850 | -110 | 395.713108 | -0.277979167 | N | unexplained, post-term | M |
| 39 | 3748 | 3375 | 373 | 395.713108 | 0.942602083 | N | Unexplained obese and previous SB | M |

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| 42 | 3770 | 3850 | -80 | 395.713108 | -0.202166667 | N | Infection | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 41 | 3870 | 3700 | 170 | 389.1178895 | 0.436885593 | N | Unexplained, unexplained | M |
| 38 | 3870 | 3175 | 695 | 395.713108 | 1.756322917 | N | Unexplained obese | M |
| 41 | 3890 | 3700 | 190 | 389.1178895 | 0.488283898 | N | Unexplained, post-term | M |
| 41 | 3914 | 3700 | 214 | 389.1178895 | 0.549961864 | N | Unexplained obese and postterm | M |
| 41 | 3930 | 3700 | 230 | 389.1178895 | 0.591080508 | N | Unexplained, post-term | M |
| 42 | 3950 | 3850 | 100 | 395.713108 | 0.252708333 | N | Unexplained lesion, placenta | M |
| 42 | 3960 | 3850 | 110 | 395.713108 | 0.277979167 | N | Ascending infection | M |

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| 40 | 3960 | 3550 | 410 | 395.713108 | 1.036104167 | N | Unexplained lesion, clinical | M |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 39 | 4045 | 3375 | 670 | 395.713108 | 1.693145833 | N | Unexplained with IDDM and previous SB | M |
| 41 | 4095 | 3700 | 395 | 389.1178895 | 1.015116525 | N | Unexplained, post-term | M |
| 38 | 4096 | 3175 | 921 | 395.713108 | 2.32744375 | N | Unexplained lesion, placenta | M |
| 40 | 4100 | 3550 | 550 | 395.713108 | 1.389895833 | N | Unexplained, unexplained | M |
| 40 | 4105 | 3550 | 555 | 395.713108 | 1.40253125 | N | Birth trauma | M |
| 40 | 4136 | 3550 | 586 | 395.713108 | 1.480870833 | N | Unexplained lesion. Placenta | M |
| 40 | 4225 | 3550 | 675 | 395.713108 | 1.70578125 | N | Unexplained lesion, baby | M |
| 42 | 4230 | 3850 | 380 | 395.713108 | 0.960291667 | N | Unexplained, post-term | M |

Appendices

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| ---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 40 | 4300 | 3550 | 750 | 395.713108 | 1.8953125 | N | Unexplained <br> obese with <br> previous SB | M |
| 41 | 4450 | 3700 | 750 | 389.1178895 | 1.927436441 | N | Unexplained <br> post-term | M |
| 41 | 4480 | 3700 | 780 | 389.1178895 | 2.004533898 | N | Placenta | M |
| 40 | 4715 | 3550 | 1165 | 395.713108 | 2.944052083 | N | Unexplained, <br> unexplained | M |
| 36 | 4720 | 2700 | 2020 | 362.7370157 | 5.568772727 | N | Unexplained <br> obese with <br> GDM | M |
|  |  |  |  |  |  |  |  |  |
| 40 | 5130 | 3550 | 1580 | 395.713108 | 3.992791667 | N | Unexplained <br> obese and <br> previous SB | M |
|  |  |  |  |  |  |  |  |  |
| 41 | 5150 | 3700 | 1450 | 389.1178895 | 3.726377119 | N |  |  |

## Appendix 6: Thymus gland measurements

| Gestation | Thymic weight | Lobule area (mm2) | Medulla <br> Area (mm2) | Cortex <br> Area (mm2) | CM ratio | Number of HC (6 fields at x4) | Distance between lobules ( 6 fields at x4) (Micro meters) | $\begin{aligned} & \text { Number of TBMs } \\ & \text { (1xHPF) } \end{aligned}$ | VB Grade | Category |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 40 | 8.7 | 4.46 | 1.28 | 3.18 | 2.484375 | 147 | 83.75 | 29 | 2 | Control |
| 26 | 1.6 | 4.73 | 1.01 | 3.72 | 3.683168317 | 65 | 57.25 |  | 2 | Control |
| 32 | 3.5 | 1.65 | 0.36 | 1.29 | 3.583333333 | 193 | 60.91666667 | 40 | 2 | Control |
| 31 | 4.4 | 0.931 | 0.23 | 0.701 | 3.047826087 | 111 | 97.9 | 32 | 2 | Control |
| 38 | 4 | 1.55 | 0.813 | 0.737 | 0.906519065 | 97 | 63.91666667 | 21 | 3 | Control |
| 39 | 11.4 | 5.96 | 1.17 | 4.79 | 4.094017094 | 69 | 106.9833333 | 43 | 3 | Control |
| 35 | 9.6 | 0.709 | 0.229 | 0.48 | 2.096069869 | 93 | 105.1833333 | 70 | 3 | Control |
| 35 | 8.63 | 5.43 | 2.27 | 3.16 | 1.392070485 | 74 | 82.65 | 50 | 2 | Control |
| 26 | 0.9 | 0.858 | 0.15 | 0.708 | 4.72 | 68 | 124.2166667 | 34 | 2 | Control |
| 40 | 11.2 | 5.27 | 1.57 | 3.7 | 2.356687898 | 238 | 94.46666667 | 41 | 4 | Control |
| 39 | 14.2 | 0.673 | 0.109 | 0.564 | 5.174311927 | 35 | 88.28333333 | 54 | 3 | Control |
| 24 | 1.8 | 0.835 | 0.358 | 0.477 | 1.332402235 | 89 | 126.8666667 | 33 | 2 | Control |
| 37 | 17.1 | 1.97 | 0.297 | 1.673 | 5.632996633 | 129 | 125.35 | 41 | 2 | Control |
| 36 | N/G | 2.4 | 0.664 | 1.736 | 2.614457831 | 61 | 127.1 | 55 | 3 | Control |
| 37 | 3.6 | 1.01 | 0.139 | 0.871 | 6.26618705 | 129 | 105.7833333 | 47 | 2 | Control |
| 36 | 9.2 | Too high grade | Too high grade | Too high grade | Too high grade | 199 | 78.1 | 55 | 3 | Control |
| 37 | 15.4 | 2.4 | 0.404 | 1.996 | 4.940594059 | 83 | 98.7 | 21 | 2 | Control |
| 25 | 1 | 0.869 | 0.239 | 0.63 | 2.635983264 | 93 | 102.9833333 | 34 | 1 | Control |
| 29 | 4.1 | 1.68 | 0.298 | 1.382 | 4.637583893 | 181 | 123.5 | 39 | 2 | Control |
| 40 | 19 | Too autolysed | Too autolysed | Too autolysed | Too autolysed | 141 | 60.26666667 | 76 | 2 | Control |
| 31 | 2.8 | 1.65 | 0.751 | 0.899 | 1.197070573 | 194 | 81.3 | 35 | 2 | SGA Ab placenta |
| 24 | 0.5 | Not Thymus | Not thymus | Not Thymus | Not Thymus | Not thymus | Not thymus | Not thymus | Not Thymus | SGA Ab placenta |
| 28 | 0.8 | 1.21 | 0.549 | 0.661 | 1.204007286 | 45 | 65.03333333 | $\underline{28}$ | 2 | SGA Ab <br> placenta |
| 29 | 0.7 | 4.72 | 1.98 | 2.74 | 1.383838384 | 262 | 80.16666667 | 35 | 2 | SGA Ab placenta |
| 39 | 6.6 | 1.29 | 0.2999 | 0.9901 | 3.301433811 | 56 | 76.8 | Too autolysed | 3 | SGA Ab placenta |
| 24 | 0.11 | 1.41 | 0.645 | 0.765 | 1.186046512 | 48 | 82.71666667 | 24 | 2 | SGA Ab placenta |
| 27 | 0.4 | 0.556 | 0.231 | 0.325 | 1.406926407 | 61 | 108.0166667 | 36 | 4 | SGA Ab placenta |
| 24 | 0.2 | 0.838 | 0.372 | 0.466 | 1.252688172 | 77 | 78.63333333 | 31 | 2 | SGA Ab placenta |
| 24 | 0.55 | 0.692 | 0.263 | 0.429 | 1.631178707 | 107 | 89.8 | 67 | 2 | SGA Ab placenta |
| 32 | 0.25 | 0.439 | 0.139 | 0.3 | 2.158273381 | 70 | 82.65 | 33 | 2 | SGA Ab |


|  |  |  |  |  |  |  |  |  |  | placenta |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28 | 1.3 | 0.5 | 0.176 | 0.324 | 1.840909091 | 220 | 120.4333333 | 68 | 2 | SGA Ab placenta |
| 37 | 2.5 | 1 | 0.234 | 0.766 | 3.273504274 | 219 | 90.15 | 78 | 3 | SGA Ab placenta |
| 28 | 0.37 | 0.104 | 0.0201 | 0.0839 | 4.174129353 | 134 | 91 | 61 | 2 | SGA Ab placenta |
| 35 | 2.8 | 0.88 | 0.206 | 0.674 | 3.27184466 | 124 | 125.3666667 | 42 | 3 | SGA Ab placenta |
| 31 | 1.05 | Too high grade | Too high grade | Too high grade | Too high grade | 165 | 135.85 | 63 | 4 | SGA Ab placenta |
| 25 | 0.45 | 0.545 | 0.217 | 0.328 | 1.511520737 | 132 | 62.53333333 | 30 | 2 | SGA Ab placenta |
| 39 | 3.8 | 8.26 | 2.41 | 5.85 | 2.427385892 | 108 | 147.7666667 | 44 | 2 | SGA N placenta |
| 26 | 0.8 | 1.59 | 0.279 | 1.311 | 4.698924731 | 117 | 41.16666667 | 34 | 1 | SGA N placenta |
| 40 | 7.8 | 3.94 | 1.95 | 1.99 | 1.020512821 | 189 | 60.26666667 | 56 | 2 | SGA N placenta |
| 25 | 1.5 | 2.04 | 0.245 | 1.795 | 7.326530612 | 22 | 84.9 | 29 | 2 | SGA N placenta |
| 38 | 9.6 | 1.79 | 0.603 | 1.187 | 1.968490879 | 113 | 67.5 | 22 | 3 | SGA N placenta |
| 27 | 1.5 | 2.59 | 1.2 | 1.39 | 1.158333333 | 81 | 76.98333333 | 26 | 2 | SGA N placenta |
| 29 | 0.8 | 2.39 | 1.11 | 1.28 | 1.153153153 | 69 | 89.18333333 | 41 | 2 | SGA N placenta |
| 24 | N/G | 1.9 | 0.702 | 1.198 | 1.706552707 | 46 | 105.1833333 | 33 | 2 | SGA N placenta |
| 38 | 4.7 | Too Autolysed | Too autoloysed | Too autolysed | Too autolysed | 81 | 88.13333333 | 44 | 2 | SGA N placenta |
| 40 | 8.7 | 1.23 | 0.286 | 0.944 | 3.300699301 | 150 | 152.6333333 | 36 | 2 | SGA N placenta |
| 30 | 1.72 | 0.397 | 0.0939 | 0.3031 | 3.227902023 | 142 | 112 | 52 | 3 | SGA N placenta |
| 27 | 1.05 | 2.02 | 0.587 | 1.433 | 2.441226576 | 46 | 100.0166667 | 28 | 2 | SGA N placenta |

## Appendix 7: Proteomic results

| Accession <br> Number <br> Key | Accession |
| :---: | :---: |
| 1 | P23284 |
| 2 | P62937;C9J5S7;E5RIZ5;F8WE65;P62937-2 |
| 3 | Q8N0Y7 |
| 4 | P62701;A6NH36 |
| 5 | P08246 |
| 6 | Q04917;A2IDB2 |
| 7 | P08107;P08107-2;P17066 |
| 8 | P07437;Q5JP53;Q5ST81 |
| 9 | P05108;C9JXV4;E7EPP8;P05108-2 |
| 10 | I3L504;C9J4W5;C9J7B5;F8WCJ1;I3L397;P63241;P63241-2;Q9GZV4 |
| 11 | Q58FF3 |
| 12 | Q13509-2;A0A0B4J269;Q13509 |
| 13 | A0A087X0S5;P12109 |
| 14 | P31946;P31946-2;Q4VY19;Q4VY20 |
| 15 | P04083;Q5T3N0;Q5T3N1 |
| 16 | A0A087WUJ4;Q92618 |
| 17 | P12814;H0YJ11;H0YJW3;H7C5W8;H9KV75;P12814-2;P12814-3;P12814-4 |
| 18 | P49454;A0A087WTY4 |
| 19 | P02768;A0A087WWT3;A0A0C4DGB6;B7WNR0;C9JKR2;D6RHD5;H0YA55;H7C013;P02768-2;P02768-3 |
| 20 | P18669;P15259 |
| 21 | P62269 |
| 22 | F8VSD4;F8VV71;F8VZ29;P61088;Q5JXB2 |
| 23 | P31947;P31947-2 |
| 24 | P61158 |


| 25 | E9PJZ0 |
| :---: | :---: |
| 26 | E5RHG9;B7Z2R2;P14927;P14927-2 |
| 27 | Q99497 |
| 28 | P19105;J3QRS3;O14950 |
| 29 | I6L9I8;Q9H201;Q9H201-2 |
| 30 | P07910- <br> 3;B2R5W2;B2RXH8;B4DSU6;B4DY08;B7ZW38;G3V251;G3V2H6;G3V2Q1;G3V3K6;G3V4C1;G3V4M8;G3V4W0;G3V555;G3V575;G3V576;G3V5X6; O60812;P07910;P07910-2;P07910-4;P0DMR1 |
| 31 | P04259;P02538;P48668 |
| 32 | P30043;M0QZL1;M0R192 |
| 33 | P09211;A0A087X243;A0A087X2E9;A8MX94 |
| 34 | P01009-2;P01009 |
| 35 | X6RJP6;P37802;P37802-2 |
| 36 | M0R1M6 |
| 37 | A0A0A0MRE3;A0A0C4DGK3;G3V5X4;Q8WXH0;Q8WXH0-2;Q8WXH0-7 |
| 38 | Q6DN14;D6R8Z9;D6RA42;D6RC97;H0Y8M9;H0Y9S8;H0Y9Y6;Q6DN14-2;Q6DN14-3;Q6DN14-4 |
| 39 | P12429;D6RFG5 |
| 40 | P27338-2 |
| 41 | P00915;E5RFE7;E5RFL2;E5RG43;E5RG81;E5RGU8;E5RH81;E5RHP7;E5RIF9;E5RII2;E5RJF6;E5RJI8;H0YBE2 |
| 42 | P15880;E9PMM9;E9PPT0;E9PQD7;H0YE27;H0YEN5;H3BNG3 |
| 43 | P51884 |
| 44 | Q96QV6;P16104;Q8IUE6 |
| 45 | J3QRK5;J3KSM4;J3QLP7 |
| 46 | P08133-2;P08133 |
| 47 | Q9BVQ7-2;Q9BVQ7;Q9BVQ7-3 |
| 48 | P09104;F5H0C8;F5H1C3;P09104-2 |
| 49 | P30044-2;P30044;P30044-3;P30044-4 |
| 50 | P62834;A6NIZ1;B7ZB78;F5GZG1;F5H823;P61224;P61224-2;P61224-3;P61224-4 |
| 51 | P20929-2 |


| 52 | P02671-2;A0A087WUA0;P02671 |
| :---: | :---: |
| 53 | P07355;A6NMY6;H0YKL9;H0YKS4;H0YKV8;H0YKX9;H0YKZ7;H0YL33;H0YLE2;H0YM50;H0YMD0;H0YMD9;H0YMM1;H0YMT9;H0YMU9;H0Y MW4;H0YN28;H0YN42;H0YN52;H0YNA0;H0YNP5;P07355-2 |
| 54 | O95428-6;H0YMM2;O95428;095428-2;095428-4;O95428-5 |
| 55 | A8MW49;P07148;Q9NQV6-6 |
| 56 | Q9BTM1;H0YFX9;P04908;P0C0S8;P20671;Q16777;Q6F113;Q71UI9-5;Q7L7L0;Q93077;Q96KK5;Q99878;Q9BTM1-2 |
| 57 | P69891 |
| 58 | P40926;G3XAL0;P40926-2 |
| 59 | P30086 |
| 60 | P14061;A0A0A0MQS7;B4DU11 |
| 61 | P02008 |
| 62 | P68363;C9J2C0;C9JDS9;F5H5D3;F8VQQ4;F8VRK0;F8VRZ4;F8VS66;F8VVB9;F8VWV9;F8VX09;P68363-2;Q13748;Q13748-2;Q6PEY2;Q71U36;Q71U36-2;Q9BQE3;Q9NY65;Q9NY65-2;V9GZ17 |
| 63 | P08758;D6RBE9;D6RBL5;D6RCN3;E9PHT9 |
| 64 | P84077;C9J1Z8;F5H423;P61204;P61204-2;P84085 |
| 65 | Q9UJZ1;Q9UJZ1-2 |
| 66 | O14931-6;O14931-3 |
| 67 | P98161-2;P98161;P98161-3 |
| 68 | P14625;F8W026;H0YIV0;Q96GW1 |
| 69 | P69892;E9PBW4 |
| 70 | A0A0A0MS07;A0A087WV47;A0A087WYC5;A0A087WYE1;A0A087X010;A0A087X079;A0A087X1C7;A0A0A0MS08;P01857 |
| 71 | Q9UBI6 |
| 72 | P35754 |
| 73 | J3KNE3;P68402 |
| 74 | M0R210;A0A087WZ27;M0QX76;M0R1M5;M0R3H0;P62249;Q6IPX4 |
| 75 | P05388-2;F8VPE8;F8VU65;F8VW21;F8VWS0;F8W1K8;G3V210;P05388;Q8NHW5 |
| 76 | F8VXI2 |
| 77 | P13645 |
| 78 | P04792;C9J3N8;F8WE04 |
| 79 | Q6B0K9 |

$\left.\begin{array}{|l|l|}\hline 80 & \begin{array}{l}\text { P07951;A0A087WWU8;B7Z596;D6R904;F5H7S3;H0YK48;H0YKP3;H0YKX5;H0YL52;H0YL80;H0YNC7;H7BYY1;J3KN67;K7ENT6;K7EP68;K7ERG } \\ 3 ; P 06753 ; P 06753-2 ; P 06753-3 ; P 06753-4 ; P 06753-5 ; P 06753-6 ; P 07951-2 ; P 07951-3 ; P 09493 ; P 09493-10 ; P 09493-2 ; P 09493-3 ; P 09493-4 ; P 09493-5 ; P 09493-~\end{array} \\ \text { 6;P09493-7;P09493-8;P09493-9;P67936;P67936-2;Q5HYB6;Q5TCU3;Q5TCU8;Q6ZN40 }\end{array}\right]$.

| 107 | O60281;E5RFE6;H0YAU0;J3KNV1;O60281-2 |
| :--- | :--- |
| 108 | Q149M9-3;F8W0U9;Q149M9 |
| 109 | J3KT29;B9ZVP7;C9JD32;P62829 |
| 110 | P06733;K7EM90;P06733-2;P13929-3 |
| 111 | H0YCR7 |
| 112 | Q9HC52;C9J6K3;C9JM54 |
| 113 | P59665;P59666 |
| 114 | Q6ZMR3;A0A087WUM2 |
| 115 | P68871;F8W6P5 |
| 116 | P00491;G3V5M2 |
| 117 | P18615-4;A0A0A0MSN9;A0A0A0MT02;E9PD43;P18615;P18615-3 |
| 118 | P07195;A8MW50;C9J7H8;F5H793 |
| 119 | Q9BXT6-5;Q9BXT6 |
| 120 | Q5VVC9;P62913;P62913-2;Q5VVC8 |
| 121 | P61626;A0A0B4J259;F8VV32 |
| 122 | P30050 |
| 123 | P68366;P68366-2 |
| 124 | P30041 |
| 125 | J3QTB2;J3QTA6;Q9BRQ6 |
| 126 | Q6DRA6;Q6DN03 |
| 127 | Q9BYX7 |
| 128 | A6NN06;Q5XG85 |
| 129 | P02774;D6RBJ7;D6RF35;P02774-2;P02774-3 |
| 130 | P0CG05;A0A075B6K9;A0A075B6L0;P0CG06 |
| 131 | P09382 |
| 132 | P49448 |
| 133 | A0A0C4DGX0 |
| 135 | Q13011 |


| 136 | P02792;A0A087X1B9 |
| :--- | :--- |
| 137 | P05164-3;J3QSF7;P05164;P05164-2 |
| 138 | P02787;C9JB55;F8WEK9;H7C5E8 |
| 139 | Q5T6W2;P61978;P61978-2;P61978-3 |
| 140 | P13647;H0YI76 |
| 141 | P62081;B5MCP9 |
| 142 | P11142;E9PI65;E9PK54;E9PKE3;E9PLF4;E9PN25;E9PN89;E9PNE6;E9PPY6;E9PQQ4;P11142-2;P48741 |
| 143 | J3QSW6;H7BXZ5;O60229 |
| 144 | A0A087WUV9;Q9NV66;Q9NV66-2 |
| 145 | C9J0D1;C9J386;P0C0S5;Q71U19;Q71U19-2;Q71UI9-3;Q71U19-4 |
| 146 | Q58FF7 |
| 147 | P60866;E5RIP1;E5RJX2;P60866-2 |
| 148 | P62805 |
| 149 | Q7EQJ4;B7Z4G8;F5GZ08;P51693;P51693-2 |
| 150 | P92878;E7EN38;E7ESD9;E9PM98;Q92878-2 |
| 151 | H0YD706-2;E7EUT5;P04406 |
| 152 | Q5HY54;H0Y5F3;H7C2E7;P21333;P21333-2;Q60FE5 |
| 153 | P60709;B8ZZJ2;C9JTX5;C9JUM1;C9JZR7;E7EVS6;F8WB63;F8WCH0;G5E9R0;I3L1U9;I3L3I0;I3L3R2;J3KT65;K7EM38;P63261 |
| 154 | P02675;D6REL8 |
| 155 | P12111;E7ENL6;P12111-2;P12111-3;P12111-4;P12111-5 |
| 156 | O94964-2;H0YDM2;O94964 |
| 157 | K7EKH6 |
| 158 | Q8WXA9;Q8WXA9-2 |
| 159 | Q13404;A0A0A0MSL3;G3V2F7;I3L0A0;Q13404-1;Q13404-2;Q13404-6;Q13404-7 |
| 160 | Q13023;G3V3H2;G3V3H7;G3V569;Q13023-2 |
| $162 ~$ |  |
| 164 |  |


| 165 | P05386 |
| :--- | :--- |
| 166 | Q16352;A0A087WYG8 |
| 167 | A0A087WVV1;P49721 |
| 168 | P07737;I3L3D5;K7EJ44 |
| 169 | P08779;K7ENW6 |
| 170 | C9JC84;C9JEU5;C9JPQ9;C9JU00;P02679;P02679-2 |
| 171 | H0YK65 |
| 172 | D6RF44;D6RAF8;H0Y8G5;H0YA96;Q14103;Q14103-2;Q14103-3;Q14103-4 |
| 173 | E9PLL6;E9PJD9;E9PLX7;P46776 |
| 174 | P06576;F8W079;F8W0P7;H0YH81 |
| 175 | H0YIN9 |
| 176 | P02533;F5GWP8;K7EMS3;K7EPJ9;P19012;Q04695 |
| 177 | Q9BVA1;Q13885 |
| 178 | D6RFL4;P08571 |
| 179 | P10809 |
| 180 | Q96H55;Q96H55-3;Q96H55-4 |
| 181 | P35527;K7EQQ3;Q99456 |
| 182 | P19971;C9JGI3;P19971-2 |
| 183 | Q9Y4C8 |
| 184 | P17661 |
| 185 | A6QL64;Q8N2N9 |
| 186 | Q9BZ23;E5RHA5;Q9BZ23-3;Q9BZ23-4;Q9H999;V9GYZ0 |
| 187 | F8W6K2 |
| 188 | P05787;P05787-2 |
| 189 | P11021 |
| 190 | Q99819;A2ID99;C9J9L9 |
| 191 | A0A075B6E2;P39019 |
| 192 | E5RI24 |
| 193 | P02100;A8MUF7 |


| 194 | P30101 |
| :--- | :--- |
| 195 | A0A0C4DG40;E7ENN3;Q8NF91;Q8NF91-4;Q8NF91-7 |
| 196 | P38646 |
| 197 | Q03001;E7ERU0;E7ETB9;E9PEB9;E9PHM6;F6QMI7;F8W9J4;Q03001-13;Q5T0V7 |
| 198 | P63151 |
| 199 | P55084-2;P55084 |
| 200 | P34931 |
| 201 | Q06830;A0A0A0MSI0 |
| 202 | P62820-2;E7END7;E9PLD0;P62820;Q92928;Q9H0U4 |
| 203 | P07197;E7EMV2;E7ESP9;P07197-2 |
| 204 | H3BML9;H3BN54;H3BPK4;Q96A32 |
| 205 | Q15582;H0Y8L3;H0Y8M8 |
| 206 | P09110;B4DVF4;C9JDE9;P09110-2 |
| 207 | P51993;P51993-2 |
| 208 | P04040 |
| 209 | P55072 |
| 210 | Q13162;H7C3T4 |
| 211 | Q10570 |
| 212 | P13796;P13796-2 |
| 213 | P08727;C9JM50 |
| 214 | P00924;U3KQP4 |
| 215 | Q9NUU6 |
| 216 | Q5SX87;P50395;P50395-2;Q5SX91 |
| 217 | P05109 |
| 218 | Q9UGJ0;F8WDA1;Q9UGJ0-3 |
| 219 | H3BQK9;H3BPE1 |
| 220 | P35908;Q5XKE5 |
| 221 | P18206-2;A0A096LPE1;P18206 |
| 222 | P62258;B4DJF2;I3L3T1;K7EIT4;K7EM20;P62258-2 |


| 223 | P05783;F8VZY9 |
| :---: | :---: |
| 224 | A0A087X1H5;H7C3K3;Q15057 |
| 225 | P29401;A0A0B4J1R6;P29401-2 |
| 226 | M0R300;M0R0P8;Q13459;Q13459-2 |
| 227 | P25054;E9PFT7;P25054-2 |
| 228 | Q14CN4-2;H0YHD9;Q14CN4;Q14CN4-3 |
| 229 | P53814;A0A087WVP4;A0A087X1R1;P53814-5;P53814-6 |
| 230 | Q96KP4;A0A087WVS2;A0A087WYZ1;J3KRD5;J3KSV5;J3QKQ0;J3QKT2;J3QL02;J3QLU1;J3QQN6;J3QR27;J3QRD0 |
| 231 | Q96CX2 |
| 232 | G8JLA2;B7Z6Z4;F8VPF3;F8VXL3;F8VZU9;F8W180;F8W1R7;G3V1V0;G3V1Y7;H0YI43;J3KND3;P60660;P60660-2 |
| 233 | Q15084-3;Q15084;Q15084-2;Q15084-4;Q15084-5 |
| 234 | O60858;060858-3 |
| 235 | P13929-2;E5RG95;E5RGZ4;E5RI09;K7EKN2;K7EPM1;P13929 |
| 236 | P07900-2;P07900 |
| 237 | F5GWN5;O00750;Q5SW97;Q5SW98 |
| 238 | P00761 |
| 239 | Q7Z6B0-3;A0A0A0MTK0;A0A0A0MTP0;Q7Z6B0;Q7Z6B0-2 |
| 240 | P54652 |
| 241 | P02751-17;H0Y4K8;H0Y7Z1;P02751;P02751-10;P02751-11;P02751-12;P02751-13;P02751-14;P02751-15;P02751-3;P02751-4;P02751-5;P02751-6;P02751-7;P02751-8;P02751-9 |
| 242 | P27797 |
| 243 | H7BZJ3 |
| 244 | P68032;A6NL76;C9JFL5;F6QUT6;F6UVQ4;P62736;P63267;P63267-2;P68133 |
| 245 | Q02539 |
| 246 | P0DML2;A0A087WU19;A0A087WUG6;A0A087WX75;A0A087WXJ5;A0A087X0G4;A0A0B4J1R0;A6NFB4;B1A4G9;B1A4H2;H0YM39;J3QT06;P0124 1;P01241-2;P01241-3;P01241-4;P01241-5;P01242;P01242-2;P01242-3;P01242-4;P0DML3;P0DML3-2;P0DML3-3;Q14406;Q14406-2;Q14406-3;Q14406-4 |
| 247 | P10599;P10599-2 |
| 248 | K7EK07;B4DEB1;K7EMV3;K7EP01;K7ES00;P68431;P84243;Q16695;Q5TEC6;Q6NXT2;Q71DI3 |
| 249 | P08238;G3V2J8;Q58FF6 |
| 250 | E9PMD7;A0A087WYY5;C9J9S3;C9JP48;E7ETD8;F5H037;F5H1L6;F8VR82;F8VYE8;F8W0W8;F8WE71;P36873;P36873-2;P62136;P62136-2;P62140 |


| 251 | F8W0B5;F8VRK6 |
| :--- | :--- |
| 252 | P52907 |
| 253 | P00338-3;F5GXH2;F5GXY2;F5GYU2;F5GZQ4;F5H5J4;F5H6W8;P00338;P00338-2;P00338-4;P00338-5 |
| 254 | P61981;E9PG15;P27348 |
| 255 | Q8N3U4;Q8N3U4-2 |
| 256 | P08311 |
| 257 | P07339;H7C1V0;H7C469 |
| 258 | P41219;F8W835;P41219-2 |
| 259 | O60814;P57053;P58876;P62807;Q5QNW6;Q5QNW6-2;Q93079;Q96A08;Q99877;Q99879;Q99880;U3KQK0 |
| 260 | P68104;A0A087WV01;A0A087WVQ9;P68104-2;Q05639;Q5VTE0 |
| 261 | P31751;M0R0P9 |
| 262 | Q9UKD2 |
| 263 | P25101 |
| 264 | P20160 |
| 265 | Q12955;Q12955-4;Q12955-5;Q12955-6;Q12955-7 |
| 266 | Q8WZ42-12;A0A0A0M03TS7 |
| 267 | F8WDD7;A0A0A6YYG9;F8WCF6;H7C0A3;P59998;P59998-2;P59998-3;P59998-4;R4GN08 |
| 268 | A0A087X130;A0A075B6H6;A0A075B6H7;A0A087WTX5;A0A087WWV8;A0A087WYL9;A0A087WZW8;A0A0B4J1TT9;A0A0C4DH55;A0A0C4DH90;P |
| 269 | P31150 |
| 270 | P61604;B8ZZL8;S4R3N1 |
| 271 | P08670;B0YJC4;B0YJC5;H7C5W5;P07196;P08729;Q5JVS8 |
| 272 | P0A096LP30;Q8NDA2;Q8NDA2-2;Q8NDA2-3 |
| 273 | P00558;P00558-2 |
| 274 | Q16402;P10412;P16403 |
| 275 | 276 |
| 277 | 278 |


| 279 | Q9H6S0;D6RA70;D6RF50 |
| :--- | :--- |
| 280 | Q6S8J3 |
| 281 | Q13951;J3KS23 |
| 282 | O95678 |
| 283 | A5A3E0 |
| 284 | I3L4N8 |
| 285 | A0A0A0MRQ5 |
| 286 | C9JM00;O75635;O75635-2 |
| 287 | Q9NX36 |
| 288 | P06899;P23527;P33778;Q16778;Q8N257 |
| 289 | B0QYN7 |
| 290 | O43707;F5GXS2;H7C144;O43707-2;O43707-3 |
| 291 | Q9Y2E4;E7EPU2 |
| 292 | A8K7Q2 |
| 293 | F8W754 |
| 294 | H7C123 |
| 295 | Q96C32;A0A087WV77;B4DV12;F5GXK7;F5GYU3;F5GZ39;F5H265;F5H2Z3;F5H388;F5H6Q2;F5H747;J3QKN0;J3QS39;J3QSA3;J3QTR3;K7EMA8;M <br> 0R1V7;M0R2S1;P0CG47;P0CG48;P62979;P62987;Q5PY61 <br> 296 |
| 297 | Q9BZF1-3;F8VQX7;F8VUA7;F8VVD3;F8VVE7;F8VZ43;Q9BZF1;Q9BZF1-2 |
| 298 | P49585;C9J050;C9JEJ2 |
| 299 | P0CG38 |
| 300 | P0CG39 |
| 301 | Q562R1 |
| 302 | Q9Y536 |
| 303 | P29590;H3BVD2;P29590-2;P29590-3;P29590-4;P29590-5;P29590-8;P29590-9 |
| 304 | O43678-2;O43678 |
| 305 | Q12929;F5GYM8;F5H0R8;F5H1B5;F5H2B8;F5H3Q6 |


|  | Peptide count | Unique peptides | Confidence score | Anova (p) | Max fold change | Fractions | Occurrences | Highest mean conditio |  | Description | Normalized abundance |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  | Control |  |  | No Funisitis |  | Funisitis |  |
|  |  |  |  |  |  |  |  |  | Lowest mean condition |  | 1 | 2 | 3 | 1 | 2 | 1 | 2 |
| 1 | 15 | 12 | 102.0762 | 0.003508607 | 1.147509577 | 2 | 1 | No Funisitis | Funisitis | Peptidyl-prolyl cis-trans isomerase B OS=Homo sapiens GN=PPIB PE=1 $\mathrm{SV}=2$ | 147651.9 | 141480.3 | 147801.9 | 152353.6 | 151718.6 | 132778.5 | 132205.9 |
| 2 | 15 | 10 | 86.5089 | 0.010496563 | 1.241654952 | 1;2 | 2 | Funisitis | No <br> Funisitis | Peptidyl-prolyl cis-trans isomerase A OS=Homo sapiens GN=PPIA PE=1 SV=2 | 157239.8 | 157097.6 | 150743 | 149182.3 | 135975.3 | 176096.2 | 177971.2 |
| 3 | 5 | 3 | 25.6349 | 0.016703596 | 1.136192469 | 1;2 | 2 | No <br> Funisitis | Funisitis | Probable phosphoglycerate mutase 4 OS=Homo sapiens GN=PGAM4 PE=2 $\mathrm{SV}=1$ | 13414.44 | 13931.79 | 14478.65 | 14180.25 | 13925.65 | 12271.45 | 12465.47 |
| 4 | 3 | 3 | 16.5092 | 0.030609615 | 1.221985903 | 2 | 1 | Control | No <br> Funisitis | 40S ribosomal protein S 4 , X isoform OS=Homo sapiens GN=RPS4X PE=1 SV=2 | 96504.94 | 97956.54 | 101240.2 | 86914.83 | 74408.18 | 82210.32 | 82876.29 |
| 5 | 6 | 4 | 15.0455 | 0.058167813 | 1.816108606 | 2 | 1 | Funisitis | No <br> Funisitis | Neutrophil elastase OS=Homo sapiens $\mathrm{GN}=$ ELANE $\mathrm{PE}=1 \mathrm{SV}=1$ | 36922.31 | 27751.71 | 37678.69 | 27277.88 | 19263.19 | 40529.58 | 43994.06 |
| 6 | 6 | 1 | 55.1172 | 0.06176162 | 1.467476885 | 1;2 | 2 | Funisitis | No <br> Funisitis | 14-3-3 protein eta OS=Homo sapiens GN=YWHAH PE=1 SV=4 | 13511.34 | 13389.64 | 14616.63 | 12189.14 | 8841.331 | 15580.36 | 15281.37 |
| 7 | 12 | 4 | 86.2934 | 0.067021796 | 1.221748371 | 1;2 | 2 | No Funisitis | Control | Heat shock 70 kDa protein 1A/1B OS=Homo sapiens GN=HSPA1A PE=1 SV=5 | 79151.71 | 74688.03 | 66072.8 | 90608.41 | 88510.13 | 79563.26 | 79398.45 |
| 8 | 7 | 4 | 36.0544 | 0.06818497 | 1.132143505 | 1;2 | 2 | No <br> Funisitis | Funisitis | Tubulin beta chain OS=Homo sapiens $\mathrm{GN}=\mathrm{TUBB}$ PE=1 SV=2 | 108361.7 | 111041.2 | 106842.3 | 127299.2 | 117568.8 | 103679 | 112608.1 |
| 9 | 6 | 5 | 35.5446 | 0.076304305 | 1.160005716 | 1 1 | 1 | No <br> Funisitis | Funisitis | Cholesterol side-chain cleavage enzyme, mitochondrial OS=Homo sapiens GN=CYP11A1 $\mathrm{PE}=1 \mathrm{SV}=2$ | 55599.45 | 52281.99 | 56768.27 | 58232.93 | 52913.21 | 46176.14 | 49639.03 |
| 10 | 2 | 2 | 9.0432 | 0.082184774 | 1.168135605 | 2 | 1 | No <br> Funisitis | Funisitis | Eukaryotic translation initiation factor 5A-1 OS=Homo sapiens GN=EIF5A PE=1 SV=1 | 39142.9 | 43376.65 | 38911.42 | 44874.26 | 43854.05 | 39236.29 | 36720.92 |
| 11 | 1 | 1 | 4.6221 | 0.09359994 | 1.357792222 | 1 | 1 | No Funisitis | Funisitis | Putative endoplasmin-like protein OS=Homo sapiens $\mathrm{GN}=\mathrm{HSP90B2P}$ PE=5 $\mathrm{SV}=1$ | 33858.07 | 26882.28 | 35451.13 | 33261.1 | 34823.26 | 24298.59 | 25844.84 |
| 12 | 2 | 1 | 15.1166 | 0.101588241 | 1.129218552 | 1 | 1 | No Funisitis | Funisitis | Isoform 2 of Tubulin beta-3 chain $\mathrm{OS}=$ Homo sapiens GN=TUBB3 | 29281.73 | 30667.44 | 31429.81 | 36326.17 | 32341.28 | 30655.24 | 30154.47 |
| 13 | 10 | 9 | 57.1123 | 0.127223827 | 1.428132774 | 1 | 1 | No <br> Funisitis | Funisitis | Collagen alpha-1(VI) chain OS=Homo sapiens $\mathrm{GN}=\mathrm{COL} 6 \mathrm{~A} 1 \mathrm{PE}=1 \mathrm{SV}=1$ | 122372 | 89294.41 | 97435.57 | 111214.9 | 128362.8 | 78817.26 | 88938.66 |
| 14 | 10 | 2 | 83.6191 | 0.131797899 | 1.259832837 | 1;2 | 2 | Funisitis | Control | 14-3-3 protein beta/alpha OS=Homo sapiens GN=YWHAB PE=1 SV=3 | 10054.36 | 9414.034 | 11410.42 | 13089.27 | 11382.58 | 11924.37 | 14010.38 |
| 15 | 14 | 12 | 120.3505 | 0.138524117 | 1.212442322 | 1;2 | 2 | No <br> Funisitis | Funisitis | $\begin{aligned} & \text { Annexin A1 OS=Homo } \\ & \text { sapiens GN=ANXA1 PE=1 } \\ & \mathrm{SV}=2 \end{aligned}$ | 124341 | 142567.2 | 129533.4 | 157817.4 | 135614 | 120283.3 | 121733.4 |
| 16 | 1 | 1 | 11.0316 | 0.140351526 | 2.487457035 | 2 | 1 | Control | Funisitis | Zinc finger protein 516 (Fragment) OS=Homo sapiens GN=ZNF516 PE=1 | 378536.5 | 466631.5 | 334905.3 | 226177.7 | 294063 | 72110.19 | 244162.8 |


|  |  |  |  |  |  |  |  |  |  | $\mathrm{SV}=1$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 17 | 15 | 9 | 85.5505 | 0.141312714 | 1.508627139 | 1;2 | 2 | Control | No Funisitis | Alpha-actinin-1 OS=Homo sapiens $\mathrm{GN}=\mathrm{ACTN} 1 \mathrm{PE}=1$ SV=2 | 215717.1 | 145543.1 | 216420 | 135318.9 | 119959.6 | 168141.3 | 202792.3 |
| 18 | 12 | 5 | 62.5878 | 0.152334469 | 1.244063314 | 1 | 1 | Funisitis | Control | Centromere protein F OS=Homo sapiens GN=CENPF PE=1 SV=2 | 40573.69 | 36722.69 | 46634.88 | 55616.18 | 46693.54 | 54652.49 | 48133.07 |
| 19 | 46 | 40 | 367.5547 | 0.162733654 | 1.211427684 | 1;2 | 2 | Control | Funisitis | Serum albumin OS=Homo sapiens GN=ALB PE=1 SV=2 | 325151.1 | 403078.1 | 336724.1 | 347330.9 | 329778.8 | 284626.2 | 301433.4 |
| 20 | 6 | 2 | 30.9098 | 0.164552402 | 1.161534138 | 1;2 | 2 | Control | Funisitis | Phosphoglycerate mutase 1 OS=Homo sapiens GN=PGAM1 PE $=1 \mathrm{SV}=2$ | 45670.11 | 42985.03 | 50490.41 | 43400.58 | 46917.82 | 38416.87 | 41446.21 |
| 21 | 3 | 2 | 15.4882 | 0.181637225 | 1.640412248 | 2 | 1 | Funisitis | No Funisitis | 40S ribosomal protein S18 OS=Homo sapiens $\mathrm{GN}=\mathrm{RPS} 18 \mathrm{PE}=1 \mathrm{SV}=3$ | 43612.02 | 38425 | 52368.75 | 43024.13 | 24413.74 | 58149.96 | 52475.96 |
| 22 | 5 | 5 | 31.469 | 0.190763409 | 1.414538029 | 2 | 1 | No Funisitis | Funisitis | Ubiquitin-conjugating enzyme E2 N OS=Homo sapiens GN=UBE2N PE=1 $\mathrm{SV}=1$ | 93252.38 | 142761.5 | 100116.3 | 149694.6 | 155135.7 | 118755.4 | 96742.67 |
| 23 | 7 | 2 | 60.0578 | 0.19491784 | 1.26184777 | 1;2 | 2 | Funisitis | No <br> Funisitis | 14-3-3 protein sigma OS=Homo sapiens $\mathrm{GN}=\mathrm{SFN}$ PE=1 SV=1 | 27441.44 | 25619.28 | 23148.75 | 25257.65 | 19699.45 | 28622.23 | 28106.8 |
| 24 | 3 | 2 | 16.6985 | 0.202611005 | 1.317007853 | 1 | 1 | Funisitis | Control | Actin-related protein 3 OS=Homo sapiens $\mathrm{GN}=\mathrm{ACTR} 3$ PE $=1 \mathrm{SV}=3$ | 10653.41 | 10460.91 | 7750.659 | 9750.308 | 10474.43 | 13766.38 | 11577.22 |
| 25 | 1 | 1 | 5.6144 | 0.22329092 | 1.912920894 | 2 | 1 | No <br> Funisitis | Funisitis | Neuroblast differentiationassociated protein AHNAK (Fragment) OS=Homo sapiens GN=AHNAK PE=1 SV=1 | 1712.572 | 4332.149 | 3313.25 | 4812.626 | 6746.474 | 3489.785 | 2552.858 |
| 26 | 1 | 1 | 4.6983 | 0.223401068 | 1.441253753 | 2 | 1 | Funisitis | No <br> Funisitis | Cytochrome b-c1 complex subunit $7 \mathrm{OS}=\mathrm{Homo}$ sapiens GN=UQCRB PE=1 $\mathrm{SV}=1$ | 70328.09 | 63631.35 | 71279.18 | 68425.53 | 44045.73 | 90542.57 | 71557.06 |
| 27 | 5 | 3 | 27.6044 | 0.22697338 | 1.136376374 | 2 | 1 | No Funisitis | Funisitis | Protein deglycase DJ-1 OS=Homo sapiens GN=PARK7 PE=1 SV=2 | 81500.64 | 85158.5 | 70054.78 | 89459.48 | 89053.6 | 78242.41 | 78847.33 |
| 28 | 2 | 2 | 16.0485 | 0.231477384 | 1.315872151 | 2 | 1 | Funisitis | No <br> Funisitis | $\begin{aligned} & \text { Myosin regulatory light } \\ & \text { chain 12A OS=Homo } \\ & \text { sapiens GN=MYL12A } \\ & \mathrm{PE}=1 \mathrm{SV}=2 \\ & \hline \end{aligned}$ | 74263.24 | 57167.78 | 68925.34 | 56033.55 | 57561.9 | 65593.77 | 83883.33 |
| 29 | 1 | 1 | 5.6532 | 0.235470488 | 1.291847595 | 1 | 1 | No Funisitis | Control | $\begin{aligned} & \text { EPN3 protein OS=Homo } \\ & \text { sapiens GN=EPN3 PE=1 } \\ & \text { SV }=1 \end{aligned}$ | 28789.69 | 22986.59 | 32063.68 | 37078.3 | 35127.33 | 33556.69 | 27379.5 |
| 30 | 2 | 2 | 9.6429 | 0.243018303 | 1.126467629 | 2 | 1 | No <br> Funisitis | Control | Isoform 3 of Heterogeneous nuclear ribonucleoproteins C1/C2 OS=Homo sapiens GN=HNRNPC | 10589.62 | 11228.49 | 11601.94 | 12137.61 | 12960.12 | 13032.01 | 11182.73 |
| 31 | 6 | 3 | 43.5493 | 0.243315471 | 1.158619474 | 1 | 1 | Funisitis | Control | Keratin, type II cytoskeletal 6B OS=Homo sapiens GN=KRT6B PE $=1 \mathrm{SV}=5$ | 110642.5 | 97874.5 | 102997.4 | 115941.2 | 93973.72 | 120266 | 120351.8 |
| 32 | 5 | 5 | 42.882 | 0.263617338 | 1.721866582 | 2 | 1 | Control | Funisitis | Flavin reductase (NADPH) OS=Homo sapiens GN=BLVRB PE=1 SV=3 | 182024.3 | 303350.5 | 184561.7 | 144647.9 | 206053.5 | 94633.64 | 164750.2 |
| 33 | 8 | 8 | 56.8992 | 0.265010194 | 1.174309228 | 1;2 | 2 | Control | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Glutathione S-transferase P OS=Homo sapiens GN=GSTP1 PE=1 SV=2 | 202602.4 | 177307.3 | 217276.5 | 162210.2 | 176818.1 | 171292.3 | 193635 |
| 34 | 2 | 1 | 15.9327 | 0.271357517 | 2.081709461 | 1 | 1 | Funisitis | No Funisitis | Isoform 2 of Alpha-1antitrypsin OS=Homo sapiens GN=SERPINA1 | 23874.11 | 12935.11 | 15959.03 | 13021.91 | 11767.71 | 16534.15 | 35070.65 |


| 35 | 8 | 8 | 44.2945 | 0.278934588 | 1.078498446 | 1;2 | 2 | Control | No Funisitis | Transgelin-2 (Fragment) <br> OS=Homo sapiens <br> GN=TAGLN2 $\mathrm{PE}=1 \mathrm{SV}=1$ | 130888.2 | 123236.2 | 124072.2 | 122603.3 | 111176.5 | 121635.5 | 129716.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 36 | 6 | 1 | 36.9392 | 0.281965158 | 2.8269693 | 1;2 | 2 | Funisitis | No Funisitis | Ubiquitin-60S ribosomal protein L40 (Fragment) $\mathrm{OS}=\mathrm{Homo}$ sapiens GN=UBA52 PE=1 SV=1 | 55850.1 | 32544.88 | 51551.04 | 20315.67 | 20043.79 | 23487.3 | 90607.65 |
| 37 | 7 | 4 | 38.3708 | 0.288343098 | 1.201690239 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Nesprin-2 OS=Homo } \\ & \text { sapiens GN=SYNE2 PE=1 } \\ & \mathrm{SV}=1 \end{aligned}$ | 69492.51 | 83430.97 | 72815.63 | 65258.92 | 83342.66 | 65023.59 | 60210.63 |
| 38 | 3 | 2 | 19.4567 | 0.293529074 | 1.138454795 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Multiple C2 and } \\ & \text { transmembrane domain- } \\ & \text { containing protein } 1 \\ & \text { OS=Homo sapiens } \\ & \text { GN=MCTP1 PE=2 SV=2 } \end{aligned}$ | 56936.31 | 46229.37 | 50078.56 | 49582.93 | 49926.81 | 43489.69 | 46248.46 |
| 39 | 1 | 1 | 5.0084 | 0.29547485 | 1.162185315 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Annexin A3 OS=Homo } \\ & \text { sapiens GN=ANXA3 PE=1 } \\ & S V=3 \end{aligned}$ | 58671.72 | 67559.82 | 73831.65 | 59275.5 | 60669.11 | 53961.21 | 60801.42 |
| 40 | 3 | 3 | 9.4567 | 0.299473398 | 1.327361354 | 2 | 1 | Funisitis | Control | Isoform 2 of Amine oxidase [flavin-containing] B OS=Homo sapiens GN=MAOB | 10604.15 | 8976.22 | 12022.61 | 11822.69 | 9405.293 | 16362.03 | 11603.68 |
| 41 | 11 | 9 | 78.1691 | 0.304828163 | 1.439605265 | 1;2 | 2 | Control | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \\ & \hline \end{aligned}$ | Carbonic anhydrase 1 OS=Homo sapiens $\mathrm{GN}=\mathrm{CAl}$ PE $=1 \mathrm{SV}=2$ | 259607.5 | 177793.4 | 264298.9 | 146851.9 | 178098.3 | 175519.7 | 256360.3 |
| 42 | 3 | 2 | 17.1718 | 0.308030131 | 1.436968889 | 1 | 1 | No <br> Funisitis | Control | 40S ribosomal protein S2 OS=Homo sapiens GN=RPS2 PE=1 SV=2 | 14556.05 | 14826.09 | 7533.157 | 18534.95 | 16829.15 | 19467.3 | 15216.03 |
| 43 | 5 | 5 | 40.2043 | 0.311608467 | 1.145476145 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Lumican OS=Homo } \\ & \text { sapiens GN=LUM PE=1 } \\ & \mathrm{SV}=2 \end{aligned}$ | 75451.99 | 81259.39 | 89981.5 | 82400.14 | 78211.86 | 65957.48 | 77617.68 |
| 44 | 13 | 2 | 53.4567 | 0.31175468 | 1.376858702 | 1;2 | 2 | Funisitis | Control | Histone H2A type 1-A OS=Homo sapiens GN=HIST1H2AA PE=1 $\mathrm{SV}=3$ | 57060.15 | 51618.75 | 43512.94 | 71150.49 | 52527.6 | 82730.61 | 56967.17 |
| 45 | 7 | 1 | 35.6576 | 0.314194099 | 1.273974498 | 1;2 | 2 | No <br> Funisitis | Funisitis | $\begin{aligned} & \text { Protein UBBP4 OS=Homo } \\ & \text { sapiens GN=UBBP4 PE=1 } \\ & \text { SV }=1 \end{aligned}$ | 117603.5 | 149176.3 | 147021.6 | 185262.7 | 154249.6 | 152468.5 | 114030 |
| 46 | 4 | 4 | 18.396 | 0.322504409 | 1.148158213 | 1 | 1 | Funisitis | No Funisitis | Isoform 2 of Annexin A6 OS=Homo sapiens GN=ANXA6 | 56062.73 | 47539.03 | 48369.45 | 46961.94 | 45696.3 | 49762.72 | 56623.6 |
| 47 | 2 | 1 | 9.0131 | 0.326254036 | 2.411222071 | 1 | 1 | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Funisitis | Isoform 2 of <br> Spermatogenesis-associated <br> protein 5-like protein 1 <br> OS=Homo sapiens <br> GN=SPATA5L1 | 990.6364 | 485.8112 | 2087.925 | 1768.597 | 1745.419 | 765.0894 | 692.2694 |
| 48 | 8 | 2 | 59.3015 | 0.33720689 | 1.170493712 | 1;2 | 2 | No Funisitis | Control | $\begin{aligned} & \text { Gamma-enolase OS=Homo } \\ & \text { sapiens GN=ENO2 PE=1 } \\ & \text { SV=3 } \end{aligned}$ | 13229.15 | 14053.32 | 10672.76 | 14770.01 | 14847.56 | 13596.92 | 12005.63 |
| 49 | 5 | 5 | 37.2308 | 0.343084533 | 1.150358096 | 2 | 1 | Control | Funisitis | Isoform <br> Cytoplasmic+peroxisomal of Peroxiredoxin-5, mitochondrial OS=Homo sapiens GN=PRDX5 | 37179.12 | 37582.76 | 40961.25 | 35984.5 | 38380.18 | 29464.8 | 37600.19 |
| 50 | 1 | 1 | 5.8184 | 0.345707053 | 1.748682779 | 2 | 1 | Control | Funisitis | Ras-related protein Rap-1A OS=Homo sapiens $\mathrm{GN}=$ RAP1A PE $=1 \mathrm{SV}=1$ | 13027.36 | 8657.778 | 22316.52 | 14327.89 | 13573.71 | 6616.725 | 10158.44 |
| 51 | 8 | 6 | 27.0271 | 0.358470963 | 1.459084314 | 2 | 1 | Control | No Funisitis | Isoform 2 of Nebulin OS=Homo sapiens GN=NEB | 43959.89 | 60351.09 | 34391.87 | 25934.32 | 37440.06 | 36048.31 | 43240.29 |
| 52 | 22 | 19 | 179.4866 | 0.359889667 | 1.144194624 | 1;2 | 2 | Control | No Funisitis | Isoform 2 of Fibrinogen alpha chain OS=Homo sapiens $\mathrm{GN}=\mathrm{FGA}$ | 296864.5 | 288558.1 | 248775.7 | 232287.7 | 253759.2 | 239591.9 | 277201.4 |


| 53 | 14 | 6 | 104.4274 | 0.361682773 | 1.242147222 | 1;2 | 2 | Funisitis | No <br> Funisitis | $\begin{aligned} & \text { Annexin A2 OS=Homo } \\ & \text { sapiens GN=ANXA2 PE=1 } \\ & \text { SV=2 } \end{aligned}$ | 185854.7 | 154727.4 | 136978.8 | 137262.3 | 138617.1 | 153278.6 | 189404.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 54 | 3 | 2 | 13.6222 | 0.365856175 | 1.335799028 | 1 | 1 | Funisitis | Control | Isoform 6 of Papilin OS=Homo sapiens GN=PAPLN | 7452.006 | 6781.532 | 10849.76 | 12641.95 | 8876.582 | 9929.122 | 12408.37 |
| 55 | 8 | 7 | 63.2127 | 0.367951059 | 2.087366384 | 1;2 | 2 | Funisitis | Control | Fatty acid-binding protein, liver OS=Homo sapiens GN=FABP1 PE=1 SV=1 | 115095.7 | 129945.6 | 113071.6 | 197388.5 | 106331.9 | 364888.7 | 133453.2 |
| 56 | 17 | 6 | 51.1149 | 0.371655581 | 1.286740772 | 1;2 | 2 | No <br> Funisitis | Control | Histone H2A.J OS=Homo sapiens GN=H2AFJ PE=1 $\mathrm{SV}=1$ | 859205.8 | 814166.8 | 702863.5 | 1201501 | 836899 | 1029547 | 816372.9 |
| 57 | 53 | 5 | 264.6564 | 0.374333368 | 1.451959281 | 1;2 | 2 | Funisitis | Control | Hemoglobin subunit gamma-1 OS=Homo sapiens GN=HBG1 PE=1 $\mathrm{SV}=2$ | 2625100 | 2078839 | 2636075 | 2979680 | 1983270 | 4487685 | 2617250 |
| 58 | 14 | 12 | 98.5629 | 0.375281966 | 1.206194853 | 1;2 | 2 | No Funisitis | Control | Malate dehydrogenase, mitochondrial OS=Homo sapiens GN=MDH2 PE=1 $\mathrm{SV}=3$ | 105067.6 | 127124.7 | 104242.6 | 149952.8 | 120584.5 | 128448.1 | 105863.2 |
| 59 | 5 | 4 | 38.9433 | 0.384547978 | 1.343765693 | 2 | 1 | Funisitis | Control | Phosphatidylethanolaminebinding protein 1 OS=Homo sapiens GN=PEBP1 PE=1 SV=3 | 44568.56 | 41790.09 | 52120.22 | 57938.59 | 43252.08 | 74649.68 | 49405.76 |
| 60 | 6 | 5 | 40.1177 | 0.388284255 | 1.335431438 | 1;2 | 2 | No <br> Funisitis | Control | Estradiol 17-betadehydrogenase 1 OS=Homo sapiens GN=HSD17B1 PE=1 SV=3 | 28020.73 | 21360.38 | 30464.72 | 42861.66 | 28224.1 | 27078.52 | 29196.92 |
| 61 | 8 | 4 | 46.7014 | 0.388408059 | 1.179657187 | 1;2 | 2 | Funisitis | Control | Hemoglobin subunit zeta OS=Homo sapiens $\mathrm{GN}=\mathrm{HBZ}$ PE=1 $\mathrm{SV}=2$ | 6806.735 | 6764.513 | 8059.612 | 8156.704 | 7126.489 | 9428.422 | 7582.911 |
| 62 | 10 | 3 | 107.9309 | 0.395224727 | 1.126914161 | 1;2 | 2 | No <br> Funisitis | Control | Tubulin alpha-1B chain OS=Homo sapiens GN=TUBA1B PE=1 SV=1 | 27867.87 | 30615.3 | 30076.09 | 36646.44 | 29886.02 | 32032.68 | 30388.45 |
| 63 | 24 | 22 | 170.8449 | 0.397058195 | 1.153768129 | 1;2 | 2 | No <br> Funisitis | Funisitis | $\begin{aligned} & \text { Annexin A5 OS=Homo } \\ & \text { sapiens GN=ANXA5 PE=1 } \\ & \text { SV=2 } \end{aligned}$ | 217206.8 | 248625 | 193081.1 | 254931.6 | 232260.7 | 218030.9 | 204230.9 |
| 64 | 5 | 5 | 29.5982 | 0.398010131 | 1.723457124 | 2 | 1 | Control | No Funisitis | ADP-ribosylation factor 1 OS=Homo sapiens $\mathrm{GN}=\mathrm{ARF} 1 \mathrm{PE}=1 \mathrm{SV}=2$ | 370808.3 | 222537 | 376410.1 | 138764.7 | 236355.5 | 182774.2 | 405281.2 |
| 65 | 5 | 3 | 31.4149 | 0.402974547 | 1.339302327 | 1 | 1 | Control | Funisitis | Stomatin-like protein 2, mitochondrial OS=Homo sapiens GN=STOML2 $\mathrm{PE}=1 \mathrm{SV}=1$ | 102886.3 | 94522.21 | 123899.4 | 70885.93 | 104804 | 61815.23 | 98122.71 |
| 66 | 2 | 2 | 9.1181 | 0.408179177 | 1.304851987 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Isoform } 6 \text { of Natural } \\ & \text { cytotoxicity triggering } \\ & \text { receptor } 3 \text { OS=Homo } \\ & \text { sapiens GN=NCR3 } \\ & \hline \end{aligned}$ | 12074.07 | 10033.83 | 14985.61 | 7853.492 | 11626.96 | 8191.362 | 10760.22 |
| 67 | 4 | 2 | 19.5823 | 0.408618327 | 1.237502748 | 2 | 1 | Control | Funisitis | Isoform 2 of Polycystin-1 OS=Homo sapiens GN=PKD1 | 17106.3 | 14445.21 | 19115.19 | 13167.56 | 17923.57 | 14286.85 | 13008.28 |
| 68 | 11 | 7 | 57.9752 | 0.410241011 | 1.083212277 | 1 | 1 | No Funisitis | Funisitis | Endoplasmin OS=Homo sapiens GN=HSP90B1 $\mathrm{PE}=1 \mathrm{SV}=1$ | 54438.45 | 55161.02 | 59488.85 | 61844.33 | 55477.15 | 55025.24 | 53283.62 |
| 69 | 52 | 4 | 272.339 | 0.410372955 | 1.443358826 | 1;2 | 2 | Funisitis | Control | $\begin{aligned} & \text { Hemoglobin subunit } \\ & \text { gamma-2 OS=Homo } \\ & \text { sapiens GN=HBG2 PE=1 } \\ & \text { SV=2 } \\ & \hline \end{aligned}$ | 692668 | 557460.7 | 719417.7 | 802733.5 | 532980.7 | 1208713 | 686461.2 |
| 70 | 3 | 2 | 19.9124 | 0.4193471 | 1.16475427 | 1 1 | 1 | Control | Funisitis | Ig gamma-1 chain C region (Fragment) OS=Homo sapiens GN=IGHG1 PE=1 $\mathrm{SV}=1$ | 48984.84 | 52898.66 | 49281.39 | 45861.42 | 50847.89 | 36308.99 | 50212.78 |


| 71 | 1 | 1 | 5.0011 | 0.424134917 | 1.197270768 | 2 | 1 | No <br> Funisitis | Control | Guanine nucleotide-binding protein $\mathrm{G}(\mathrm{I}) / \mathrm{G}(\mathrm{S}) / \mathrm{G}(\mathrm{O})$ <br> subunit gamma-12 <br> OS=Homo sapiens <br> $\mathrm{GN}=\mathrm{GNG} 12 \mathrm{PE}=1 \mathrm{SV}=3$ | 13305.27 | 11566.03 | 17059.55 | 17981.22 | 15487.17 | 14423.19 | 13702.78 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 72 | 3 | 3 | 20.4883 | 0.428348012 | 1.17805693 | 2 | 1 | No <br> Funisitis | Control | Glutaredoxin-1 OS=Homo sapiens GN=GLRX PE=1 $\mathrm{SV}=2$ | 42667.23 | 49481.72 | 34053 | 48586.5 | 50528.89 | 44072.23 | 42550.71 |
| 73 | 1 | 1 | 4.5269 | 0.431764927 | 1.369172552 | 2 | 1 | No <br> Funisitis | Funisitis | Platelet-activating factor acetylhydrolase IB subunit beta (Fragment) OS=Homo sapiens GN=PAFAH1B2 $\mathrm{PE}=1 \mathrm{SV}=1$ | 4074.366 | 6215.474 | 6122.795 | 6416.977 | 7922.224 | 6525.88 | 3947.016 |
| 74 | 4 | 4 | 26.7493 | 0.434035106 | 1.244071184 | 1;2 | 2 | No <br> Funisitis | Control | $\begin{aligned} & \text { 40S ribosomal protein S16 } \\ & \text { OS=Homo sapiens } \\ & \text { GN=RPS16 PE=1 SV=1 } \end{aligned}$ | 51447.89 | 52305.37 | 33811.32 | 53577.2 | 60516.22 | 49215.36 | 54452.53 |
| 75 | 3 | 3 | 32.1088 | 0.441302284 | 1.214003366 | 1;2 | 2 | Funisitis | Control | $\begin{aligned} & \text { Isoform } 2 \text { of } 60 \mathrm{~S} \text { acidic } \\ & \text { ribosomal protein P0 } \\ & \text { OS=Homo sapiens } \\ & \text { GN=RPLP0 } \\ & \hline \end{aligned}$ | 25401.03 | 23321.42 | 26255.49 | 33451.19 | 24733.18 | 34662.71 | 26019.6 |
| 76 | 1 | 1 | 9.6778 | 0.444846929 | 2.856377913 | 2 | 1 | Control | Funisitis | Phosphatidylinositol phosphatase PTPRQ (Fragment) OS=Homo sapiens GN=PTPRQ PE=4 $\mathrm{SV}=1$ | 36803.15 | 36924.56 | 208036.6 | 76986.59 | 96996.63 | 28775.1 | 36987.5 |
| 77 | 17 | 11 | 112.9246 | 0.446031828 | 1.242560518 | 1;2 | 2 | Funisitis | Control | Keratin, type I cytoskeletal 10 OS=Homo sapiens $\mathrm{GN}=\mathrm{KRT} 10 \mathrm{PE}=1 \mathrm{SV}=6$ | 273895.7 | 292673.4 | 200716.9 | 281413.8 | 245181.1 | 359424.8 | 276174.7 |
| 78 | 8 | 8 | 55.216 | 0.449105539 | 1.099297214 | 2 | 1 | Funisitis | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Heat shock protein beta-1 OS=Homo sapiens $\mathrm{GN}=\mathrm{HSPB} 1 \mathrm{PE}=1 \mathrm{SV}=2$ | 78881.61 | 82770.44 | 68804.32 | 72683.24 | 76608.93 | 81311.79 | 82804.68 |
| 79 | 2 | 2 | 6.3224 | 0.454011436 | 1.230541259 | 1;2 | 2 | Funisitis | Control | Hemoglobin subunit mu OS=Homo sapiens GN=HBM PE=2 SV=1 | 21273.76 | 17217.95 | 25422.26 | 27875.17 | 23021.22 | 30101.59 | 22330.93 |
| 80 | 2 | 2 | 18.4127 | 0.45690348 | 1.230993548 | 1 | 1 | No <br> Funisitis | Funisitis | Tropomyosin beta chain OS=Homo sapiens $\mathrm{GN}=\mathrm{TPM} 2 \mathrm{PE}=1 \mathrm{SV}=1$ | 63109.82 | 81027.22 | 64853.44 | 87001 | 66648.11 | 67257.76 | 57559.39 |
| 81 | 6 | 4 | 42.0717 | 0.462198286 | 1.262259474 | 1;2 | 2 | Funisitis | Control | Protein-glutamine gammaglutamyltransferase 2 OS=Homo sapiens GN=TGM2 PE=1 SV=2 | 23581.26 | 22839.32 | 15338.61 | 29144.1 | 22826.65 | 23956.22 | 21264.73 |
| 82 | 6 | 3 | 38.737 | 0.467317529 | 1.124034217 | 1 | 1 | Control | No Funisitis | Moesin OS=Homo sapiens GN=MSN PE=1 SV=3 | 40941.48 | 33171.34 | 41914.6 | 34340.93 | 34475.14 | 40367.53 | 36571.3 |
| 83 | 44 | 8 | 195.6523 | 0.469516505 | 1.224080542 | 1;2 | 2 | Control | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Hemoglobin subunit delta OS=Homo sapiens GN=HBD PE=1 SV=2 | 308760.9 | 294234.2 | 282530.8 | 201853.8 | 280427 | 184992.1 | 301919.3 |
| 84 | 6 | 3 | 29.5413 | 0.469539432 | 1.311455443 | 1 | 1 | No <br> Funisitis | Control | A-kinase anchor protein 9 OS=Homo sapiens GN=AKAP9 PE=1 SV=3 | 16514.95 | 20123.77 | 11887.34 | 22675.82 | 19750.7 | 20821.25 | 14130.57 |
| 85 | 3 | 1 | 34.1305 | 0.477540981 | 1.210328838 | 1 | 1 | Funisitis | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Keratin, type II cuticular Hb4 OS=Homo sapiens GN=KRT84 PE=2 SV=2 | 910.3905 | 874.2937 | 1284.314 | 985.0122 | 938.8187 | 1181.337 | 1147.131 |
| 86 | 1 | 1 | 10.0096 | 0.478444914 | 2.95981557 | 2 | 1 | Funisitis | Control | Mitochondrial pyruvate carrier 1 OS=Homo sapiens $\mathrm{GN}=\mathrm{MPC} 1 \mathrm{PE}=1 \mathrm{SV}=1$ | 39834.71 | 60411.27 | 54308.99 | 212413.2 | 48359.82 | 249311.8 | 55657.63 |
| 87 | 1 | 1 | 6.1818 | 0.479296346 | 1.1994748 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Vitronectin OS=Homo } \\ & \text { sapiens GN=VTN PE }=1 \\ & \text { SV }=1 \end{aligned}$ | 142681.8 | 118379.8 | 158758.5 | 126965.8 | 143411.8 | 98457.65 | 134877.8 |
| 88 | 2 | 2 | 8.7495 | 0.480306853 | 1.313101171 | 2 | 1 | No Funisitis | Control | Insulin-like peptide INSL6 OS=Homo sapiens <br> GN=INSL6 PE=2 SV=2 | 22836.83 | 25084.11 | 20406.28 | 37156.61 | 22657.08 | 31442.64 | 23534.51 |
| 89 | 15 | 8 | 137.7449 | 0.481301647 | 1.13837356 | 1;2 | 2 | Funisitis | No Funisitis | 14-3-3 protein zeta/delta OS=Homo sapiens | 129244.6 | 102191.4 | 117405 | 112447.6 | 108676.6 | 117197.1 | 134524.9 |


|  |  |  |  |  |  |  |  |  |  | GN=YWHAZ PE=1 SV=1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 90 | 1 | 1 | 5.0902 | 0.481838848 | 1.118807518 | 2 | 1 | Control | Funisitis | Coagulation factor XIII A chain (Fragment) OS=Homo sapiens GN=F13A1 PE=1 SV=2 | 23056.94 | 25693.76 | 26822.46 | 22548.35 | 23655.72 | 19820.94 | 25211.03 |
| 91 | 12 | 6 | 73.5299 | 0.487279205 | 1.221458007 | 1 | 1 | Control | No <br> Funisitis | Neurofilament heavy <br> polypeptide OS=Homo sapiens $\mathrm{GN}=\mathrm{NEFH}$ PE $=1$ $\mathrm{SV}=4$ | 32909.91 | 26763.95 | 40834.32 | 25595.08 | 29261.86 | 28250.83 | 30824.19 |
| 92 | 12 | 11 | 81.1699 | 0.487534481 | 1.112602144 | 1 | 1 | No <br> Funisitis | Control | Carbamoyl-phosphate synthase [ammonia], mitochondrial OS=Homo sapiens GN=CPS1 PE=1 SV=2 | 75446.45 | 76669.54 | 85263.25 | 92819.3 | 83253.13 | 95068.9 | 77192.54 |
| 93 | 5 | 4 | 30.1895 | 0.489628273 | 1.35838052 | 1;2 | 2 | No Funisitis | Control | Fas-binding factor OS=Homo sapiens $\mathrm{GN}=\mathrm{FBF} 1 \mathrm{PE}=1 \mathrm{SV}=2$ | 30328.87 | 42924.82 | 23283.78 | 52694.89 | 34728.18 | 36666.18 | 33017.48 |
| 94 | 4 4 | 3 | 9.6877 | 0.490715524 | 1.237199761 | 2 | 1 | Funisitis | Control | Thiosulfate sulfurtransferase/rhodanese- <br> like domain-containing protein $2 \mathrm{OS}=$ Homo sapiens GN=TSTD2 $\mathrm{PE}=1$ SV=1 | 65522.84 | 61492.66 | 62801.47 | 78386.08 | 49214.35 | 89134.09 | 67426.92 |
| 95 | 1 | 1 | 5.5488 | 0.493289744 | 1.090972099 | 2 | 1 | No Funisitis | Funisitis | Transcription factor SOX12 OS=Homo sapiens GN=SOX12 PE=2 SV=2 | 162305.9 | 147024.4 | 146518 | 150398 | 170935.7 | 141574.3 | 152964.6 |
| 96 | 6 | 4 | 26.3748 | 0.494123172 | 1.173891018 | 1;2 | 2 | Control | Funisitis | Ankyrin repeat domaincontaining protein 36 C OS=Homo sapiens $\mathrm{GN}=\mathrm{ANKRD} 36 \mathrm{C}$ PE=2 SV=3 | 57358.77 | 46029.61 | 48849.28 | 46915.53 | 44943.62 | 35927.13 | 50530.45 |
| 97 | 4 | 1 | 20.5842 | 0.496535511 | 1.235432862 | 1 | 1 | No Funisitis | Control | Isoform 2 of BCL-6 corepressor OS=Homo sapiens GN=BCOR | 271055.2 | 354705.2 | 244078.9 | 411252.8 | 305165.8 | 380168.9 | 297179 |
| 98 | 5 | 5 | 34.366 | 0.499633757 | 1.220281275 | 1;2 | 2 | Funisitis | No Funisitis | Protein S100-A9 OS=Homo sapiens $\mathrm{GN}=\mathrm{S} 100 \mathrm{~A} 9 \mathrm{PE}=1 \mathrm{SV}=1$ | 155385.3 | 108976.3 | 141947.4 | 115275.5 | 119560.8 | 126971.1 | 159595.2 |
| 99 | 14 | 14 | 110.9718 | 0.50467293 | 1.163896393 | 1 | 1 | Funisitis | Control | Protein disulfide-isomerase OS=Homo sapiens $\mathrm{GN}=\mathrm{P} 4 \mathrm{HB}$ PE= $=1 \mathrm{SV}=3$ | 116207.8 | 81439.3 | 113433.8 | 103308.7 | 109952.8 | 118285.5 | 123091.8 |
| 100 | 12 | 11 | 109.1429 | 0.507032497 | 1.093494517 | 1;2 | 2 | Funisitis | Control | Isoform 2 of ATP synthase subunit alpha, mitochondrial OS=Homo sapiens GN=ATP5A1 | 59819.52 | 53654.27 | 47902.07 | 55206.02 | 53418.93 | 60834.93 | 56807.49 |
| 101 | 20 | 16 | 147.3054 | 0.507815161 | 1.148140106 | 1;2 | 2 | Funisitis | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | $\begin{aligned} & \text { Peroxiredoxin-2 OS=Homo } \\ & \text { sapiens GN=PRDX2 PE=1 } \\ & \text { SV=5 } \end{aligned}$ | 233999.5 | 188318 | 241633.7 | 188824.3 | 202348.8 | 204066.3 | 245055.3 |
| 102 | 3 | 1 | 16.9407 | 0.509845713 | 1.38939495 | 1 | 1 | Control | Funisitis | Zinc finger protein 205 OS=Homo sapiens GN=ZNF205 PE=1 SV=2 | 57941.72 | 99410.65 | 58058.54 | 52351.76 | 74818.7 | 48492.16 | 54867.42 |
| 103 | 50 | 42 | 214.3774 | 0.510650084 | 1.500085003 | 1;2 | 2 | Control | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Hemoglobin subunit alpha OS=Homo sapiens GN=HBA1 PE=1 SV=2 | 8162786 | 4976027 | 9173488 | 3842306 | 6073710 | 4595240 | 8111280 |
| 104 | 2 | 2 | 18.094 | 0.51179194 | 1.050567456 | 1;2 | 2 | Control | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Isoform 2 of Electron transfer flavoprotein subunit alpha, mitochondrial OS=Homo sapiens GN=ETFA | 187146.9 | 194035.9 | 178797.3 | 169878.7 | 185472.2 | 185201.9 | 181089.7 |
| 105 | 4 | 3 | 20.563 | 0.512087606 | 1.146073032 | 2 | 1 | No Funisitis | Control | Prohibitin OS=Homo sapiens $\mathrm{GN}=\mathrm{PHB}$ PE=1 $\mathrm{SV}=1$ | 31660.93 | 33539.53 | 25044.89 | 35371.36 | 33580.48 | 35023.16 | 29569.14 |


| 106 | 8 | 2 | 65.9945 | 0.517859178 | 1.165276446 | 1;2 | 2 | No <br> Funisitis | Control | Annexin OS=Homo sapien $\mathrm{GN}=\mathrm{ANXA} 2 \mathrm{PE}=1 \mathrm{SV}=1$ | 16233.1 | 16447.16 | 11890.01 | 19004.14 | 15620.31 | 16218.85 | 16728.37 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 107 | 3 | 2 | 14.737 | 0.518160027 | 1.606529126 | 2 | 1 | Control | Funisitis | Zinc finger protein 292 OS=Homo sapiens GN=ZNF292 PE=1 SV=3 | 23713.37 | 40369.97 | 15500.73 | 20279.35 | 17805.29 | 12485.84 | 20539.43 |
| 108 | 1 | 1 | 10.371 | 0.518188045 | 2.580351084 | 2 | 1 | Control | No Funisitis | Isoform 3 of NACHT and WD repeat domaincontaining protein 1 OS=Homo sapiens GN=NWD1 | 62089.32 | 104238.2 | 18929.56 | 15871.81 | 31991.72 | 5065.452 | 50088.42 |
| 109 | 4 | 4 | 18.222 | 0.522447047 | 1.140938726 | 2 | 1 | Funisitis | Control | 60S ribosomal protein L23 OS=Homo sapiens GN=RPL23 PE=1 SV=1 | 22457.43 | 22500.56 | 27671.78 | 28372.06 | 22927.32 | 29110.11 | 26133.97 |
| 110 | 23 | 13 | 157.1718 | 0.536686715 | 1.094995742 | 1;2 | 2 | No Funisitis | Control | $\begin{aligned} & \text { Alpha-enolase OS=Homo } \\ & \text { sapiens GN=ENO1 PE=1 } \\ & S V=2 \end{aligned}$ | 94236.12 | 101174 | 102827.6 | 121231.8 | 96480.95 | 107837.4 | 106427.8 |
| 111 | 1 | 1 | 5.9227 | 0.540504862 | 1.729823236 | 1 | 1 | Control | No Funisitis | Ribonuclease inhibitor (Fragment) OS=Homo sapiens $\mathrm{GN}=\mathrm{RNH} 1 \mathrm{PE}=1$ $\mathrm{SV}=1$ | 13421.71 | 6645.896 | 18779.71 | 6433.596 | 8537.998 | 4129.229 | 12066.78 |
| 112 | 2 | 2 | 9.445 | 0.541065036 | 1.179792285 | 2 | 1 | Control | Funisitis | $\begin{aligned} & \text { Chromobox protein } \\ & \text { homolog } 8 \text { OS=Homo } \\ & \text { sapiens GN=CBX8 PE=1 } \\ & \mathrm{SV}=3 \end{aligned}$ | 23718.91 | 28203.65 | 19090.46 | 21798.34 | 20567.94 | 21244.02 | 18883.39 |
| 113 | 7 | 6 | 47.4329 | 0.547699079 | 2.286501958 | 1;2 | 2 | Control | No Funisitis | Neutrophil defensin 1 OS=Homo sapiens GN=DEFA1 PE=1 SV=1 | 391192.6 | 142741.3 | 662191.5 | 150298.3 | 198451.4 | 201941.1 | 551137.8 |
| 114 | 4 | 2 | 32.445 | 0.548733955 | 1.396348678 | 1 | 1 | Control | No Funisitis | L-lactate dehydrogenase Alike 6A OS=Homo sapiens GN=LDHAL6A PE=2 SV=1 | 14582.16 | 10302.2 | 21579.11 | 10442.19 | 11741.13 | 12562.79 | 14563.3 |
| 115 | 63 | 23 | 266.2916 | 0.549177984 | 1.461810164 | 1;2 | 2 | Control | Funisitis | Hemoglobin subunit beta OS=Homo sapiens $\mathrm{GN}=\mathrm{HBB}$ PE $=1 \mathrm{SV}=2$ | 4966524 | 3809963 | 4262134 | 1923492 | 4762621 | 1621160 | 4325176 |
| 116 | 5 | 5 | 43.3274 | 0.5509211 | 1.173380269 | 2 | 1 | No <br> Funisitis | Control | Purine nucleoside phosphorylase OS=Homo sapiens GN=PNP PE=1 $\mathrm{SV}=2$ | 42088.15 | 58654.44 | 39106.1 | 55763.84 | 53633.28 | 52495.45 | 44316.39 |
| 117 | 2 | 1 | 9.5511 | 0.551911809 | 1.346399777 | 1 | 1 | Funisitis | Control | $\begin{aligned} & \text { Isoform } 3 \text { of Negative } \\ & \text { elongation factor E } \\ & \text { OS=Homo sapiens } \\ & \text { GN=NELFE } \\ & \hline \end{aligned}$ | 86678.38 | 102921.5 | 48613.21 | 123362.1 | 87540 | 133158.3 | 80661.76 |
| 118 | 6 | 4 | 38.9145 | 0.552398557 | 1.122227465 | 1;2 | 2 | No <br> Funisitis | Funisitis | L-lactate dehydrogenase B chain OS=Homo sapiens GN=LDHB PE=1 SV=2 | 55773.01 | 54106.13 | 56200.38 | 67669.73 | 52779.5 | 56367.81 | 50962.69 |
| 119 | 1 | 1 | 3.9998 | 0.553083325 | 1.291112447 | 2 | 1 | Funisitis | No Funisitis | Isoform 5 of Putative helicase Mov1011 OS=Homo sapiens GN=MOV10L1 | 104173.6 | 73064.81 | 58452.74 | 72514.03 | 72540.79 | 81597.32 | 105684.8 |
| 120 | 1 | 1 | 6.6019 | 0.564745884 | 1.162144628 | 2 | 1 | No Funisitis | Control | 60S ribosomal protein L11 (Fragment) OS=Homo sapiens GN=RPL11 PE=1 $\mathrm{SV}=1$ | 63459.23 | 63072.93 | 45793.18 | 60146.87 | 73364.44 | 59907.79 | 59733.06 |
| 121 | 3 | 3 | 27.0775 | 0.566790141 | 1.331544012 | 2 | 1 | Control | No <br> Funisitis | $\begin{aligned} & \text { Lysozyme C OS=Homo } \\ & \text { sapiens GN=LYZ PE=1 } \\ & S V=1 \end{aligned}$ | 75462.17 | 53225.4 | 77111.29 | 42389.79 | 60647.91 | 42624.08 | 76058.15 |
| 122 | 4 | 4 | 17.4632 | 0.568316714 | 1.245113385 | 1;2 | 2 | No Funisitis | Control | 60S ribosomal protein L12 OS=Homo sapiens GN=RPL12 PE=1 SV=1 | 63910.06 | 78335.3 | 41681.2 | 83212.05 | 69460.89 | 67344.27 | 61402.88 |
| 123 | 8 | 1 | 79.5944 | 0.572430415 | 1.236865005 | 1;2 | 2 | Control | Funisitis | Tubulin alpha-4A chain OS=Homo sapiens $\mathrm{GN}=\mathrm{TUBA} 4 \mathrm{~A}$ PE=1 SV=1 | 101681.6 | 77157.44 | 110249.2 | 70934.01 | 88529.28 | 56846.94 | 98970.8 |


| 124 | 5 | 5 | 30.1927 | 0.575065704 | 1.074871202 | 1;2 | 2 | No Funisitis | Control | Peroxiredoxin-6 OS=Homo sapiens GN=PRDX6 PE=1 $\mathrm{SV}=3$ | 64130.28 | 69282.57 | 58960.77 | 72325.05 | 65526.19 | 67555.05 | 61537.85 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 125 | 1 | 1 | 11.6194 | 0.578570113 | 1.161590386 | 1 | 1 | Control | Funisitis | MICOS complex subunit MIC25 OS=Homo sapiens GN=CHCHD6 PE=1 SV=1 | 64903.22 | 45190 | 53999.4 | 51967.79 | 56694.39 | 41393 | 52783.99 |
| 126 | 3 | 1 | 31.8425 | 0.582143898 | 1.652320227 | 1;2 | 2 | Control | No <br> Funisitis | Putative histone H2B type 2-D OS=Homo sapiens GN=HIST2H2BD PE=5 $\mathrm{SV}=3$ | 278152 | 153171 | 431315.1 | 146529.3 | 201521.9 | 174191.6 | 284288.5 |
| 127 | 18 | 2 | 97.2243 | 0.590857777 | 1.467685133 | 1;2 | 2 | Control | Funisitis | Putative beta-actin-like protein 3 OS=Homo sapiens GN=POTEKP $\mathrm{PE}=5 \mathrm{SV}=1$ | 15089.11 | 21542.65 | 9143.427 | 11091.59 | 12735.78 | 7614.025 | 13178.44 |
| 128 | 1 | 1 | 9.3154 | 0.592872641 | 1.394887558 | 2 | 1 | Control | Funisitis | Putative UPF0633 protein MGC21881 OS=Homo sapiens $\mathrm{PE}=5 \mathrm{SV}=1$ | 92693.89 | 84326.56 | 65479.31 | 42443.79 | 89340.18 | 33051.36 | 82847.95 |
| 129 | 1 | 1 | 15.3396 | 0.596366205 | 2.328535849 | 1 | 1 | Control | No Funisitis | Vitamin D-binding protein OS=Homo sapiens GN=GC $\mathrm{PE}=1 \mathrm{SV}=1$ | 7448.775 | 4987.348 | 27280.64 | 2543.541 | 8827.484 | 6304.124 | 17478.02 |
| 130 | 2 | 2 | 10.0227 | 0.598127908 | 1.260949083 | 2 | 1 | Funisitis | Control | Ig lambda-2 chain C regions OS=Homo sapiens GN=IGLC2 PE=1 SV=1 | 7486.777 | 9174.668 | 6666.468 | 5745.07 | 10940.14 | 9872.984 | 9737.224 |
| 131 | 6 | 6 | 29.7083 | 0.599689679 | 1.170804052 | 2 | 1 | Control | Funisitis | Galectin-1 OS=Homo sapiens GN=LGALS1 $\mathrm{PE}=1 \mathrm{SV}=2$ | 111794.2 | 102960 | 90364.73 | 86715.01 | 115721.8 | 70396.55 | 103340.9 |
| 132 | 3 | 3 | 32.2204 | 0.600115563 | 1.368881233 | 1 | 1 | Funisitis | Control | Glutamate dehydrogenase 2, mitochondrial OS=Homo sapiens GN=GLUD2 PE=1 $\mathrm{SV}=2$ | 68878.27 | 72417.66 | 36298.26 | 93886.18 | 59500.58 | 102127.4 | 59942.82 |
| 133 | 2 | 1 | 9.3217 | 0.602365603 | 1.156745388 | 2 | 1 | Control | No <br> Funisitis | Ankyrin repeat domaincontaining protein 36B OS=Homo sapiens GN=ANKRD36B PE=4 SV=1 | 17976.34 | 15507.81 | 18200.82 | 13170.96 | 16616.62 | 13449.07 | 18619.9 |
| 134 | 4 | 3 | 20.2745 | 0.608437229 | 1.169341328 | 2 | 1 | No <br> Funisitis | Control | Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial OS=Homo sapiens GN=ECH1 PE=1 SV=2 | 67862.09 | 73640.53 | 45704.81 | 71701.64 | 74237.95 | 67832.9 | 63220.53 |
| 135 | 10 | 5 | 55.6701 | 0.609383763 | 1.250175759 | 1;2 | 2 | Funisitis | No <br> Funisitis | Triosephosphate isomerase OS=Homo sapiens $\mathrm{GN}=\mathrm{TPI} 1 \mathrm{PE}=1 \mathrm{SV}=3$ | 44399.45 | 29297.8 | 38910.05 | 42720.82 | 24629.11 | 42128.91 | 42070.34 |
| 136 | 10 | 9 | 72.8725 | 0.612231812 | 1.08646386 | 1;2 | 2 | No <br> Funisitis | Control | Ferritin light chain OS=Homo sapiens GN=FTL PE=1 SV=2 | 112613.1 | 95612.16 | 127030.3 | 119459.4 | 123369.4 | 116929.2 | 122250.5 |
| 137 | 19 | 18 | 140.8629 | 0.612575517 | 1.100672876 | 1;2 | 2 | No <br> Funisitis | Control | $\begin{aligned} & \text { Isoform H7 of } \\ & \text { Myeloperoxidase } \\ & \text { OS=Homo sapiens } \\ & \text { GN=MPO } \\ & \hline \end{aligned}$ | 186892 | 160258 | 184240.8 | 220249.6 | 169675.3 | 203728 | 185405.7 |
| 138 | 8 | 8 | 56.8526 | 0.617413061 | 1.209123949 | 1 | 1 | No <br> Funisitis | Control | $\begin{aligned} & \text { Serotransferrin OS=Homo } \\ & \text { sapiens GN=TF PE=1 } \\ & \mathrm{SV}=3 \end{aligned}$ | 128213.7 | 155167 | 96936.69 | 167593.4 | 138973.8 | 164201.6 | 117134.6 |
| 139 | 2 | 2 | 9.9633 | 0.620434737 | 1.067537673 | 1 | 1 | No <br> Funisitis | Control | Heterogeneous nuclear ribonucleoprotein K (Fragment) OS=Homo sapiens GN=HNRNPK $\mathrm{PE}=1 \mathrm{SV}=1$ | 30128.63 | 30334.12 | 35895.49 | 35095.45 | 33481.92 | 33033.7 | 32700.22 |
| 140 | 5 | 1 | 36.8712 | 0.623107467 | 1.558280067 | 1 | 1 | No Funisitis | Control | Keratin, type II cytoskeletal <br> 5 OS=Homo sapiens <br> $\mathrm{GN}=\mathrm{KRT} 5 \mathrm{PE}=1 \mathrm{SV}=3$ | 22684.09 | 54111.54 | 10220.01 | 56769.23 | 33627.26 | 41635.86 | 19831.07 |
| 141 | 4 | 3 | 32.5354 | 0.623603789 | 1.194538263 | 1;2 | 2 | Funisitis | Control | 40S ribosomal protein S7 <br> OS=Homo sapiens <br> GN=RPS7 PE=1 SV=1 | 10255.71 | 7058.723 | 11398.99 | 11659.12 | 8420.049 | 11414.56 | 11451.63 |

Appendices

| 142 | 19 | 4 | 151.6967 | 0.633214391 | 1.118532033 | 1;2 | 2 | Funisitis | Control | Heat shock cognate 71 kDa protein OS=Homo sapiens $\mathrm{GN}=\mathrm{HSPA} 8 \mathrm{PE}=1 \mathrm{SV}=1$ | 159800.9 | 128791.9 | 110930 | 144874.3 | 133611.6 | 146564.9 | 151354.5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 143 | 4 | 2 | 17.1145 | 0.637841444 | 1.445543467 | 1 | 1 | No <br> Funisitis | Control | Kalirin OS=Homo sapiens GN=KALRN PE=1 SV=1 | 8576.902 | 17456.57 | 5078.64 | 18914.42 | 11068.19 | 13882.56 | 8885.318 |
| 144 | 2 | 1 | 10.6804 | 0.638263715 | 1.082895719 | 1 | 1 | Funisitis | Funisitis | S-adenosyl-L-methioninedependent tRNA 4demethylwyosine synthase OS=Homo sapiens GN=TYW1 $\mathrm{PE}=1 \mathrm{SV}=1$ | 26534.18 | 32233.89 | 26516.66 | 29558.14 | 27373.28 | 27709.43 | 24863.89 |
| 145 | 11 | 1 | 39.2311 | 0.639815825 | 1.189017701 | 1;2 | 2 | Funisitis | Funisitis | $\begin{aligned} & \text { Histone H2A OS=Homo } \\ & \text { sapiens GN=H2AFV PE=3 } \\ & \text { SV=1 } \end{aligned}$ | 7444.068 | 8457.307 | 7141.152 | 10837.36 | 7414.342 | 9040.874 | 6309.363 |
| 146 | 2 | 1 | 9.5239 | 0.639957745 | 1.167335462 | 1 | 1 | No <br> Funisitis | Control | Putative heat shock protein HSP 90-beta-3 OS=Homo sapiens GN=HSP90AB3P $\mathrm{PE}=5 \mathrm{SV}=1$ | 40171.98 | 42022.62 | 25828.8 | 43943.96 | 40122.4 | 38423.08 | 35853.6 |
| 147 | 2 | 1 | 11.8034 | 0.645422533 | 1.298147923 | 2 | 1 | Funisitis | Control | 40S ribosomal protein S20 OS=Homo sapiens GN=RPS $20 \mathrm{PE}=1 \mathrm{SV}=1$ | 27190.87 | 22079.15 | 9804.774 | 19063.2 | 28378.41 | 24278.4 | 26846.81 |
| 148 | 31 | 27 | 146.6354 | 0.647336352 | 1.117837611 | 1;2 | 2 | No <br> Funisitis | Funisitis | $\begin{aligned} & \text { Histone H4 OS=Homo } \\ & \text { sapiens GN=HIST1H4A } \\ & \text { PE=1 SV=2 } \end{aligned}$ | 1335038 | 1351279 | 943151.6 | 1365211 | 1338472 | 1186287 | 1232385 |
| 149 | 1 | 1 | 4.018 | 0.654378603 | 1.335969211 | 2 | 1 | Funisitis | Control | Amyloid-like protein 1 (Fragment) OS=Homo sapiens GN=APLP1 PE=1 $\mathrm{SV}=1$ | 5296.368 | 4600.201 | 6087.362 | 8146.159 | 5538.975 | 9666.184 | 4569.842 |
| 150 | 1 | 1 | 6.2198 | 0.656141291 | 1.18379166 | 1 | 1 | No <br> Funisitis | Control | DNA repair protein RAD50 OS=Homo sapiens GN=RAD50 PE=1 SV=1 | 92401.14 | 107885.5 | 89413.88 | 135381.3 | 93248.76 | 118546.8 | 91164.49 |
| 151 | 9 | 9 | 57.5232 | 0.658745912 | 1.070733277 | 1;2 | 2 | Funisitis | Control | Isoform 2 of <br> Glyceraldehyde-3- <br> phosphate dehydrogenase <br> OS=Homo sapiens <br> GN=GAPDH | 271603.9 | 275623.7 | 224293.5 | 283277.3 | 267451.6 | 264960 | 269866.8 |
| 152 | 1 | 1 | 5.0658 | 0.659262944 | 1.229466395 | 1 | 1 | No <br> Funisitis | Funisitis | Complex I assembly factor TMEM126B, mitochondrial (Fragment) OS=Homo sapiens GN=TMEM126B $\mathrm{PE}=1 \mathrm{SV}=4$ | 17198.45 | 22196.38 | 13537.09 | 23975.86 | 17486.77 | 19280.64 | 14443.45 |
| 153 | 8 | 5 | 48.6172 | 0.660690014 | 1.104323667 | 1 | 1 | Funisitis | Control | $\begin{aligned} & \text { Filamin-A OS=Homo } \\ & \text { sapiens GN=FLNA PE=1 } \\ & \text { SV=1 } \end{aligned}$ | 27111.92 | 23093.02 | 18254.69 | 24667.19 | 24900.46 | 24422.94 | 25978.12 |
| 154 | 76 | 5 | 374.1434 | 0.666305589 | 1.108822319 | 1;2 | 2 | No <br> Funisitis | Funisitis | Actin, cytoplasmic 1 OS=Homo sapiens $\mathrm{GN}=\mathrm{ACTB} \mathrm{PE}=1 \mathrm{SV}=1$ | 586217.7 | 650372.1 | 489997.6 | 706298.7 | 568637.3 | 580478.4 | 569332.5 |
| 155 | 26 | 20 | 247.2305 | 0.669766486 | 1.287143507 | 1;2 | 2 | Funisitis | Control | Keratin, type II cytoskeletal 1 OS=Homo sapiens <br> GN=KRT1 PE= $1 \mathrm{SV}=6$ | 261026 | 346458.7 | 166455.5 | 377556.7 | 265246.8 | 423028.4 | 241086.2 |
| 156 | 43 | 38 | 312.6718 | 0.67032289 | 1.124683407 | 1;2 | 2 | Control | Funisitis | Fibrinogen beta chain OS=Homo sapiens $\mathrm{GN}=\mathrm{FGB}$ PE $=1 \mathrm{SV}=2$ | 347424.2 | 315548.5 | 327243.9 | 280740.5 | 357697 | 242570.3 | 344389.8 |
| 157 | 55 | 45 | 392.0561 | 0.676529994 | 1.113215601 | 1 | 1 | No <br> Funisitis | Funisitis | Collagen alpha-3(VI) chain OS=Homo sapiens $\mathrm{GN}=\mathrm{COL} 6 \mathrm{~A} 3 \mathrm{PE}=1 \mathrm{SV}=5$ | 139379.9 | 170427.4 | 128216 | 177588.9 | 145394.3 | 154340.4 | 135794.9 |
| 158 | 2 | 2 | 12.191 | 0.677197951 | 1.088198425 | 2 | 1 | No <br> Funisitis | Control | Isoform 2 of Protein <br> SOGA1 OS=Homo sapiens <br> GN=SOGA1 | 238615.7 | 189214.4 | 235964.8 | 257514.7 | 224045.7 | 230332.4 | 231305.1 |
| 159 | 1 | 1 | 4.2044 | 0.678817602 | 1.13480143 | 1 | 1 | Funisitis | No Funisitis | Glial fibrillary acidic protein (Fragment) OS=Homo sapiens $\mathrm{GN}=\mathrm{GFAP}$ PE $=1 \mathrm{SV}=1$ | 43779.13 | 50257.45 | 49518.74 | 50053.34 | 38356.87 | 56554.03 | 43774.01 |


| 160 | 2 | 2 | 9.6418 | 0.680237397 | 1.155528234 | 2 | 1 | Funisitis | No <br> Funisitis | Splicing regulatory <br> glutamine/lysine-rich <br> protein 1 OS=Homo <br> sapiens GN=SREK1 PE=1 <br> $\mathrm{SV}=1$ | 33435.85 | 23829.46 | 30529.97 | 24786.71 | 28746.19 | 27631.02 | 34227.75 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 161 | 4 | 3 | 20.8974 | 0.684636554 | 1.14201905 | 2 | 1 | No Funisitis | Control | Ubiquitin-conjugating enzyme E2 variant 1 OS=Homo sapiens GN=UBE2V1 PE=1 SV=2 | 78981.9 | 72227.79 | 51646.8 | 72072.8 | 82371.18 | 63171.98 | 75915.56 |
| 162 | 2 | 2 | 10.5754 | 0.685220185 | 1.464494547 | 1 | 1 | Control | No Funisitis | A-kinase anchor protein 6 OS=Homo sapiens GN=AKAP6 PE=1 SV=3 | 1941.419 | 1597.176 | 3721.46 | 1251.808 | 2053.112 | 1496 | 2662.442 |
| 163 | 6 | 5 | 31.7072 | 0.685301865 | 1.139905556 | 1 | 1 | No Funisitis | Funisitis | $\begin{aligned} & \text { Fibulin-1 OS=Homo } \\ & \text { sapiens GN=FBLN1 PE=1 } \\ & \text { SV }=1 \end{aligned}$ | 46712.54 | 36936.75 | 51265.66 | 44088.02 | 48293.92 | 34495.66 | 46547.85 |
| 164 | 7 | 1 | 67.4307 | 0.688994937 | 1.160962732 | 1;2 | 2 | Funisitis | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Heat shock cognate 71 kDa protein (Fragment) OS=Homo sapiens GN=HSPA8 PE=1 SV=1 | 146560.7 | 104942.2 | 135875.1 | 112677.1 | 114946.1 | 111548.7 | 152713.4 |
| 165 | 2 | 1 | 11.1772 | 0.689418556 | 1.538875414 | 2 | 1 | No Funisitis | Funisitis | 60S acidic ribosomal protein P1 OS=Homo sapiens GN=RPLP1 PE=1 $\mathrm{SV}=1$ | 2919.537 | 762.5833 | 5160.433 | 4199.518 | 3756.048 | 2567.383 | 2602.344 |
| 166 | 6 | 3 | 40.3002 | 0.690084163 | 1.127856466 | 1 | 1 | No Funisitis | Funisitis | Alpha-internexin OS=Homo sapiens GN=INA PE $=1 \mathrm{SV}=2$ | 18027.71 | 23334.67 | 18980.34 | 23240.18 | 18970.98 | 20109.92 | 17316.08 |
| 167 | 1 | 1 | 5.927 | 0.690198374 | 1.369353876 | 2 | 1 | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Funisitis | Proteasome subunit beta type-2 OS=Homo sapiens GN=PSMB2 PE $=1 \mathrm{SV}=1$ | 64.5164 | 48.03742 | 1297.29 | 624.4272 | 470.3366 | 711.0676 | 88.40709 |
| 168 | 11 | 9 | 84.4185 | 0.693889616 | 1.106159738 | 1;2 | 2 | Control | Funisitis | $\begin{aligned} & \text { Profilin-1 OS=Homo } \\ & \text { sapiens GN=PFN1 PE=1 } \\ & \text { SV=2 } \end{aligned}$ | 249794.4 | 209489.3 | 223796.7 | 193943.5 | 235916.9 | 178464.7 | 233218.2 |
| 169 | 8 | 1 | 39.1948 | 0.697355099 | 1.348826769 | 1 | 1 | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Control | Keratin, type I cytoskeletal 16 OS=Homo sapiens $\mathrm{GN}=\mathrm{KRT} 16 \mathrm{PE}=1 \mathrm{SV}=4$ | 12014.87 | 21010.27 | 9107.865 | 23290.42 | 14596.33 | 22655 | 11396.27 |
| 170 | 11 | 8 | 90.1971 | 0.700484198 | 1.154572128 | 1;2 | 2 | Control | Funisitis | Fibrinogen gamma chain OS=Homo sapiens GN=FGG PE=1 SV=1 | 132001 | 139595.7 | 95180.4 | 108115 | 115744 | 92454.87 | 119327.6 |
| 171 | 1 | 1 | 4.5307 | 0.701409277 | 1.306615884 | 1 | 1 | Control | No Funisitis | Uncharacterized protein C15orf52 (Fragment) OS=Homo sapiens GN=C15orf52 PE=1 SV=1 | 36741.91 | 26127.78 | 54187.41 | 28491.34 | 31234 | 26263.76 | 38670.21 |
| 172 | 3 | 3 | 13.738 | 0.701498877 | 1.137090526 | 1 | 1 | No <br> Funisitis | Control | Heterogeneous nuclear ribonucleoprotein D0 (Fragment) OS=Homo sapiens GN=HNRNPD $\mathrm{PE}=1 \mathrm{SV}=4$ | 16936.81 | 20847.28 | 14678.18 | 22615.62 | 17153.94 | 18980.69 | 16443.56 |
| 173 | 2 | 1 | 11.9401 | 0.704815967 | 1.16193147 | 2 | 1 | No <br> Funisitis | Control | 60S ribosomal protein L27a OS=Homo sapiens <br> $\mathrm{GN}=$ RPL27A $\mathrm{PE}=1 \mathrm{SV}=1$ | 100146.9 | 106598 | 64299.97 | 95919.77 | 114037.2 | 84592.84 | 101880.8 |
| 174 | 16 | 12 | 92.9098 | 0.712963955 | 1.129645104 | 1 | 1 | No Funisitis | Control | ATP synthase subunit beta, mitochondrial OS=Homo sapiens GN=ATP5B PE=1 SV=3 | 152964.1 | 181633.9 | 123759.7 | 188858.6 | 156329.1 | 173267.8 | 142991.3 |
| 175 | 3 | 1 | 24.6884 | 0.71517349 | 1.073517909 | 1 | 1 | No Funisitis | Control | Keratin, type II cytoskeletal 5 (Fragment) OS=Homo sapiens GN=KRT5 PE=1 $\mathrm{SV}=1$ | 55521.18 | 61144.73 | 52424.33 | 66113.41 | 54900.86 | 62651.37 | 56013.41 |
| 176 | 8 | 1 | 38.5641 | 0.719810737 | 1.391338758 | 1 | 1 | No Funisitis | Control | Keratin, type I cytoskeletal 14 OS=Homo sapiens $\mathrm{GN}=\mathrm{KRT} 14 \mathrm{PE}=1 \mathrm{SV}=4$ | 1114.819 | 1859.415 | 849.6331 | 2268.197 | 1278.666 | 2473.275 | 983.6713 |
| 177 | 3 | 1 | 15.0885 | 0.720689881 | 1.088808416 | 1 | 1 | No Funisitis | Funisitis | Tubulin beta-2B chain OS=Homo sapiens $\mathrm{GN}=\mathrm{TUBB} 2 \mathrm{~B}$ PE=1 $\mathrm{SV}=1$ | 13678.3 | 13780.88 | 16376.57 | 16706.99 | 13939.97 | 14198.87 | 13948.38 |


| 178 | 3 | 2 | 21.7666 | 0.72176915 | 1.184476615 | 1 | 1 | Funisitis | Control | Monocyte differentiation antigen CD14 (Fragment) OS=Homo sapiens $\mathrm{GN}=\mathrm{CD} 14 \mathrm{PE}=1 \mathrm{SV}=1$ | 12712.55 | 8295.269 | 18249.22 | 17108.34 | 13891.02 | 14373.59 | 14160.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 179 | 5 | 4 | 36.9265 | 0.721964872 | 1.064296263 | 1 | 1 | Funisitis | No Funisitis | 60 kDa heat shock protein, mitochondrial OS=Homo sapiens GN=HSPD1 PE=1 $\mathrm{SV}=2$ | 30288.34 | 35214.61 | 32370.66 | 33256.04 | 29505.28 | 34960.69 | 31835.95 |
| 180 | 3 | 2 | 13.302 | 0.722886135 | 1.118971187 | 2 | 1 | No Funisitis | Control | Unconventional myosinXIX OS=Homo sapiens GN=MYO19 PE=2 SV=2 | 65411.13 | 66924.43 | 45738.93 | 61572.85 | 71267.3 | 55036.43 | 64315.17 |
| 181 | 17 | 14 | 153.8849 | 0.72308044 | 1.304369277 | 1;2 | 2 | Funisitis | Control | Keratin, type I cytoskeletal <br> 9 OS=Homo sapiens <br> GN=KRT9 PE=1 SV=3 | 139701.7 | 218165.6 | 110987.8 | 247896.4 | 159810.3 | 243917.1 | 125179.4 |
| 182 | 2 | 1 | 12.0438 | 0.726222099 | 1.415022411 | 1 | 1 | Control | No Funisitis | Thymidine phosphorylase OS=Homo sapiens GN=TYMP PE=1 SV=2 | 14253.07 | 7502.171 | 19063.81 | 10705.23 | 8526.058 | 9459.031 | 13911.99 |
| 183 | 2 | 2 | 7.5706 | 0.728959845 | 1.06768378 | 1 | 1 | Funisitis | Control | $\begin{aligned} & \text { Probable RNA-binding } \\ & \text { protein } 19 \text { OS=Homo } \\ & \text { sapiens GN=RBM19 PE=1 } \\ & \text { SV=3 } \\ & \hline \end{aligned}$ | 51926.95 | 43204.07 | 40243.86 | 47360.85 | 46096.95 | 46828.25 | 49530.13 |
| 184 | 8 | 1 | 84.0702 | 0.73396675 | 1.498067847 | 1 | 1 | Control | No <br> Funisitis | Desmin OS=Homo sapiens GN=DES PE= $1 \mathrm{SV}=3$ | 1205.834 | 508.7933 | 1129.597 | 445.4151 | 820.3149 | 514.3505 | 1364.152 |
| 185 | 5 | 2 | 23.2452 | 0.738909191 | 1.103790529 | 2 | 1 | Control | No Funisitis | Ankyrin repeat domaincontaining protein 36A OS=Homo sapiens $\mathrm{GN}=\mathrm{ANKRD} 36 \mathrm{PE}=2$ SV=3 | 30687.38 | 26632.82 | 29696.97 | 22253.74 | 30302.84 | 22529.45 | 30888.58 |
| 186 | 11 | 7 | 65.3602 | 0.740712537 | 1.289054105 | 1;2 | 2 | Funisitis | No Funisitis | Pantothenate kinase 2, mitochondrial OS=Homo sapiens GN=PANK2 $\mathrm{PE}=1$ SV=3 | 437817.4 | 462755.3 | 213636.3 | 303804.5 | 311322.2 | 362063.3 | 430868.2 |
| 187 | 1 | 1 | 4.6669 | 0.743160351 | 1.095939429 | 2 | 1 | Funisitis | Control | N-chimaerin (Fragment) OS=Homo sapiens GN=CHN1 PE=1 SV=1 | 1295.056 | 3067.085 | 106.532 | 1460.239 | 1764.875 | 1937.605 | 1327.325 |
| 188 | 5 | 1 | 53.7825 | 0.74677628 | 1.045956923 | 1 | 1 | Control | Funisitis | Keratin, type II cytoskeletal <br> 8 OS=Homo sapiens <br> GN=KRT8 PE=1 SV=7 | 27740.09 | 27994.54 | 24494.7 | 27095.9 | 25257.13 | 26074.84 | 25061.32 |
| 189 | 16 | 11 | 96.3814 | 0.750216144 | 1.099021901 | 1;2 | 2 | Funisitis | Funisitis | 78 kDa glucose-regulated protein OS=Homo sapiens $\mathrm{GN}=\mathrm{HSPA} 5 \mathrm{PE}=1 \mathrm{SV}=2$ | 102535.6 | 131571.3 | 117529.2 | 130605 | 110738.3 | 119919.6 | 99678.59 |
| 190 | 1 | 1 | 4.7276 | 0.755278185 | 1.224585208 | 2 | 1 | Control | Funisitis | Rho GDP-dissociation inhibitor 3 OS=Homo sapiens GN=ARHGDIG $\mathrm{PE}=2 \mathrm{SV}=2$ | 43055.85 | 24345.59 | 32144.38 | 25446.63 | 33450.92 | 18287.44 | 35905.51 |
| 191 | 3 | 3 | 19.8974 | 0.755906786 | 1.126462036 | 2 | 1 | No Funisitis | Control | 40S ribosomal protein S19 OS=Homo sapiens $\mathrm{GN}=\mathrm{RPS} 19 \mathrm{PE}=1 \mathrm{SV}=1$ | 23594.24 | 22663.1 | 14657.65 | 21649.37 | 24096.25 | 19037.46 | 22411.47 |
| 192 | 1 | 1 | 5.5253 | 0.757308024 | 1.127175057 | 2 | 1 | Funisitis | Funisitis | Arginine--tRNA ligase, cytoplasmic OS=Homo sapiens GN=RARS PE=1 $\mathrm{SV}=1$ | 35389.71 | 31480.51 | 31036.49 | 29830.76 | 38672.05 | 24543.59 | 36230.29 |
| 193 | 14 | 1 | 58.2653 | 0.758273963 | 1.147993832 | 1;2 | 2 | Funisitis | Control | Hemoglobin subunit epsilon OS=Homo sapiens $\mathrm{GN}=$ HBE $1 \mathrm{PE}=1 \mathrm{SV}=2$ | 3593.189 | 4511.461 | 2495.933 | 3847.988 | 3730.2 | 4592.158 | 3520.777 |
| 194 | 13 | 8 | 106.3763 | 0.759465788 | 1.083241317 | 1 | 1 | Control | No Funisitis | Protein disulfide-isomerase A3 OS=Homo sapiens GN=PDIA3 PE=1 SV=4 | 136651.5 | 99027.2 | 109984.4 | 105840.1 | 106893.7 | 104443 | 109247 |
| 195 | 56 | 39 | 238.7676 | 0.765894077 | 1.049126616 | 1;2 | 2 | Funisitis | Control | Nesprin-1 OS=Homo sapiens GN=SYNE1 PE=4 $\mathrm{SV}=1$ | 239157 | 224138.4 | 199425.5 | 229614.8 | 233904 | 215115.2 | 237044.5 |
| 196 | 5 | 4 | 28.7348 | 0.768304779 | 1.069931208 | 1 | 1 | No <br> Funisitis | Control | Stress-70 protein, mitochondrial OS=Homo | 19140.16 | 21767.57 | 16664.64 | 21877.97 | 19187.69 | 19468.32 | 19421.47 |


|  |  |  |  |  |  |  |  |  |  | sapiens GN=HSPA9 PE=1 $\mathrm{SV}=2$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 197 | 17 | 14 | 74.6132 | 0.774589035 | 1.19518 | 2 | 1 | Control | No Funisitis | $\begin{aligned} & \text { Dystonin OS=Homo } \\ & \text { sapiens GN=DST PE=1 } \\ & \text { SV=4 } \end{aligned}$ | 426050.4 | 288575 | 295826.5 | 229325.4 | 334300.7 | 231185.4 | 384577.2 |
| 198 | 1 | 1 | 3.7103 | 0.776673673 | 1.452057947 | 2 | 1 | Control | No Funisitis | Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B alpha isoform OS=Homo sapiens GN=PPP2R2A PE $=1 \mathrm{SV}=1$ | 1366225 | 2423043 | 766373.5 | 681156 | 1410423 | 753978.9 | 1464482 |
| 199 | 2 | 2 | 9.66 | 0.776899966 | 1.092209003 | 1 | 1 | No <br> Funisitis | Control | Isoform 2 of Trifunctional enzyme subunit beta, mitochondrial OS=Homo sapiens GN=HADHB | 15621.34 | 16359.27 | 13994.61 | 18702.51 | 14773.86 | 17361.91 | 13922.96 |
| 200 | 13 | 3 | 93.8407 | 0.77715165 | 1.048288097 | 1;2 | 2 | Funisitis | No Funisitis | Heat shock 70 kDa protein 1-like OS=Homo sapiens GN=HSPA1L PE=1 SV=2 | 25190.63 | 22701.02 | 20731.54 | 22270.77 | 23042.16 | 24179.52 | 23321.49 |
| 201 | 12 | 4 | 80.1131 | 0.779233963 | 1.125859392 | 1;2 | 2 | No Funisitis | Funisitis | Peroxiredoxin-1 OS=Homo sapiens GN=PRDX1 PE=1 $\mathrm{SV}=1$ | 52946.15 | 67623.51 | 47413.75 | 71108.22 | 54144.73 | 63685.98 | 47565 |
| 202 | 1 | 1 | 6.6434 | 0.783607062 | 1.091730628 | 2 | 1 | Control | No Funisitis | Isoform 2 of Ras-related protein Rab-1A OS=Homo sapiens $\mathrm{GN}=\mathrm{RAB} 1 \mathrm{~A}$ | 49900.49 | 40851.93 | 48541.58 | 47752 | 37308.06 | 39955.09 | 49641.62 |
| 203 | 6 | 1 | 40.3749 | 0.784803123 | 1.094620237 | 1 | 1 | No <br> Funisitis | Control | Neurofilament medium polypeptide OS=Homo sapiens GN=NEFM PE=1 SV=3 | 10305.63 | 12307.09 | 8798.041 | 12630.56 | 10291.34 | 11357.91 | 9787.787 |
| 204 | 1 | 1 | 6.678 | 0.785649852 | 1.131047496 | 1 | 1 | No <br> Funisitis | Funisitis | Myosin regulatory light chain 2, skeletal muscle isoform (Fragment) OS=Homo sapiens GN=MYLPF PE $=1 \mathrm{SV}=1$ | 245862.3 | 289030.7 | 164575.4 | 243923.9 | 273252.8 | 237755.6 | 219499 |
| 205 | 2 | 2 | 10.7533 | 0.786605354 | 1.620371415 | 1 | 1 | Control | No Funisitis | Transforming growth factor-beta-induced protein ig-h3 OS=Homo sapiens $\mathrm{GN}=\mathrm{TGFBI}$ PE $=1 \mathrm{SV}=1$ | 6255.032 | 2599.748 | 8183.742 | 2858.862 | 4151.268 | 2405.378 | 7657.635 |
| 206 | 2 | 2 | 11.0905 | 0.787408237 | 1.173720431 | 1 | 1 | Funisitis | No Funisitis | 3-ketoacyl-CoA thiolase, peroxisomal OS=Homo sapiens GN=ACAA1 PE=1 $\mathrm{SV}=2$ | 11021.7 | 14093.39 | 13221.67 | 13291.56 | 10940.95 | 17416.98 | 11025.22 |
| 207 | 2 | 2 | 9.0905 | 0.789899519 | 1.163186615 | 2 | 1 | Control | Funisitis | Alpha-(1,3)fucosyltransferase 6 OS=Homo sapiens GN=FUT6 PE=1 SV=1 | 17617.63 | 14647.86 | 10786.13 | 12222.87 | 15212.98 | 9777.672 | 14896.86 |
| 208 | 13 | 10 | 83.9575 | 0.794536242 | 1.219633422 | 1 | 1 | Control | Funisitis | Catalase OS=Homo sapiens GN=CAT PE $=1 \mathrm{SV}=3$ | 68654.36 | 36587.56 | 71951.25 | 42932.53 | 54411.86 | 39565.57 | 57290.4 |
| 209 | 6 | 6 | 42.3268 | 0.796598327 | 1.069636794 | 1 | 1 | No Funisitis | Control | $\begin{aligned} & \text { Transitional endoplasmic } \\ & \text { reticulum ATPase } \\ & \text { OS=Homo sapiens } \\ & \text { GN=VCP PE }=1 \mathrm{SV}=4 \\ & \hline \end{aligned}$ | 36177.36 | 31381.63 | 39927.81 | 42307.23 | 34340.65 | 38363.22 | 36771.87 |
| 210 | 3 | 1 | 18.4291 | 0.800730784 | 1.169938052 | 1;2 | 2 | No <br> Funisitis | Control | $\begin{aligned} & \text { Peroxiredoxin-4 OS=Homo } \\ & \text { sapiens GN=PRDX4 PE=1 } \\ & \text { SV=1 } \end{aligned}$ | 6805.63 | 9615.678 | 5061.167 | 7217.765 | 9537.677 | 9853.683 | 6116.539 |
| 211 | 2 | 2 | 10.0953 | 0.801743177 | 1.222432767 | 2 | 1 | Control | No Funisitis | Cleavage and <br> polyadenylation specificity factor subunit 1 OS=Homo sapiens GN=CPSF1 $\mathrm{PE}=1$ $\mathrm{SV}=2$ | 138476.3 | 96323.15 | 94068.07 | 64910.42 | 114441 | 68783.74 | 141863.4 |
| 212 | 9 | 8 | 57.2261 | 0.802617249 | 1.063473375 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \hline \text { Plastin-2 } \mathrm{OS}=\mathrm{Homo} \\ & \text { sapiens GN=LCP1 PE=1 } \\ & \mathrm{SV}=6 \end{aligned}$ | 88520.42 | 80552.6 | 103331.8 | 88994.85 | 86276.31 | 82834.86 | 87929.37 |
| 213 | 8 | 2 | 39.3735 | 0.806910634 | 1.041725756 | 1;2 | 2 | No Funisitis | Control | Keratin, type I cytoskeletal 19 OS=Homo sapiens | 15758.74 | 16251.54 | 16583.11 | 18240.52 | 15506.8 | 17539.59 | 15957.22 |


|  |  |  |  |  |  |  |  |  |  | $\mathrm{GN}=\mathrm{KRT} 19 \mathrm{PE}=1 \mathrm{SV}=4$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 214 | 41 | 38 | 334.487 | 0.810142744 | 1.266498758 | 1;2 | 2 | Control | Funisitis | Enolase 1 OS=Saccharomyces cerevisiae (strain ATCC 204508 / S288c) GN=ENO1 PE=1 SV=3 | 670650.6 | 1061380 | 448783 | 620906.4 | 747655.6 | 538014.2 | 609934.6 |
| 215 | 1 | 1 1 | 4.9163 | 0.810528369 | 1.266007696 | 2 | 1 | Control | No <br> Funisitis | Inactive ubiquitin thioesterase FAM105A OS=Homo sapiens $\mathrm{GN}=\mathrm{FAM} 105 \mathrm{~A}$ PE=2 SV=1 | 83372.44 | 55316.29 | 99171.34 | 44569.16 | 80685.51 | 46559.18 | 104221.7 |
| 216 | 3 | 1 | 22.1509 | 0.811455419 | 1.151117985 | 1 | 1 | Funisitis | No Funisitis | Rab GDP dissociation inhibitor beta (Fragment) OS=Homo sapiens $\mathrm{GN}=\mathrm{GDI} 2 \mathrm{PE}=1 \mathrm{SV}=1$ | 11071.19 | 7252.581 | 12922.02 | 10077.2 | 8459.316 | 10921.97 | 10415.75 |
| 217 | 3 | 3 | 34.813 | 0.811970055 | 1.093671347 | 1;2 | 2 | Control | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Protein S100-A8 OS=Homo sapiens $\mathrm{GN}=\mathrm{S} 100 \mathrm{~A} 8 \mathrm{PE}=1 \mathrm{SV}=1$ | 216670.4 | 163547.8 | 206859.2 | 169845 | 188018.4 | 158530.9 | 209104.5 |
| 218 | 2 | 1 | 15.53 | 0.814731996 | 1.194362403 | 2 | 1 | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Funisitis | 5'-AMP-activated protein kinase subunit gamma-2 OS=Homo sapiens GN=PRKAG2 PE=1 SV=1 | 46437.22 | 46117.25 | 30153.87 | 34175.25 | 52680.89 | 28676.69 | 44045.07 |
| 219 | 9 | 6 | 33.6165 | 0.81735264 | 1.104328984 | 1 | 1 | Control | No <br> Funisitis | Microtubule-actin crosslinking factor 1 , isoforms 1/2/3/5 OS=Homo sapiens $\mathrm{GN}=\mathrm{MACF} 1 \mathrm{PE}=1 \mathrm{SV}=1$ | 53606.81 | 50855.42 | 73307.31 | 55713.27 | 51603.5 | 59252.36 | 54280.01 |
| 220 | 8 | 4 | 63.3134 | 0.818452882 | 1.153183003 | 1;2 | 2 | No Funisitis | Control | Keratin, type II cytoskeletal 2 epidermal OS=Homo sapiens GN=KRT2 PE=1 $\mathrm{SV}=2$ | 37461.66 | 57701.26 | 25756.92 | 51946.65 | 41015.16 | 48179 | 32572.55 |
| 221 | 3 | 2 | 21.0185 | 0.818506251 | 1.298121555 | 1 | 1 | Funisitis | No Funisitis | Isoform 1 of Vinculin OS=Homo sapiens GN=VCL | 6069.476 | 2790.784 | 8987.941 | 4474.15 | 5508.051 | 6339.957 | 6618.153 |
| 222 | 13 | 6 | 108.0225 | 0.81923371 | 1.147219823 | 1;2 | 2 | Control | Funisitis | 14-3-3 protein epsilon OS=Homo sapiens $\mathrm{GN}=\mathrm{YWHAE} \mathrm{PE}=1 \mathrm{SV}=1$ | 374829 | 309520.9 | 342924.6 | 229267 | 416641.9 | 213684.1 | 383280.5 |
| 223 | 5 | 2 | 30.0147 | 0.820178232 | 1.058709604 | 1;2 | 2 | Funisitis | Control | Keratin, type I cytoskeletal 18 OS=Homo sapiens GN=KRT18 PE=1 SV=2 | 61490.62 | 63597.01 | 63866.69 | 71378.16 | 61384.69 | 74641.8 | 58723.37 |
| 224 | 3 | 2 | 20.0487 | 0.823814613 | 1.078095018 | 2 | 1 | No Funisitis | Control | Arf-GAP with coiled-coil, ANK repeat and PH domain-containing protein 2 OS=Homo sapiens $\mathrm{GN}=\mathrm{ACAP} 2 \mathrm{PE}=1 \mathrm{SV}=1$ | 88025.74 | 71817.99 | 60342.16 | 85113.51 | 73140.69 | 71570.45 | 76873.1 |
| 225 | 4 | 3 | 20.0716 | 0.831178649 | 1.065945617 | 1 | 1 | Funisitis | Control | Transketolase OS=Homo sapiens GN=TKT PE=1 SV=3 | 16907.3 | 15959.65 | 22675.56 | 20631.67 | 18518.86 | 21149.99 | 18320.21 |
| 226 | 3 | 2 | 11.7588 | 0.839335418 | 1.263292342 | 2 | 1 | No Funisitis | Control | Unconventional myosinIXb (Fragment) OS=Homo sapiens GN=MYO9B PE=1 $\mathrm{SV}=4$ | 121182.1 | 368408.4 | 88752.35 | 338753.5 | 148323.9 | 269117.7 | 141523.6 |
| 227 | 4 | 3 | 21.6945 | 0.841295595 | 1.080821693 | 1 | 1 | No Funisitis | Funisitis | Adenomatous polyposis coli protein OS=Homo sapiens GN=APC PE= $\mathrm{SV}=2$ | 17244.58 | 18445.76 | 22107.83 | 17471.26 | 21104.17 | 14130.47 | 21560.37 |
| 228 | 1 | 1 | 4.7783 | 0.845520537 | 1.162853214 | 1 | 1 | Control | Funisitis | Isoform 2 of Keratin, type II cytoskeletal 72 OS=Homo sapiens GN=KRT72 | 23092.99 | 42832.54 | 27201.6 | 27821.48 | 27269.09 | 28027.69 | 25362.33 |
| 229 | 2 | 2 | 7.1065 | 0.852889351 | 1.110249904 | 2 | 1 | No Funisitis | Control | $\begin{aligned} & \text { Smoothelin OS=Homo } \\ & \text { sapiens GN=SMTN PE=1 } \\ & \text { SV=7 } \end{aligned}$ | 86803.94 | 86978.26 | 49286.17 | 73491.45 | 91616.3 | 67218.17 | 82104.39 |


| 230 | 3 | 3 | 18.1884 | 0.853313384 | 1.06113532 | 1 | 1 | Control | Funisitis | Cytosolic non-specific dipeptidase $\mathrm{OS}=\mathrm{Homo}$ sapiens GN=CNDP2 PE=1 $\mathrm{SV}=2$ | 30433.19 | 29626.32 | 37234.92 | 30468.3 | 33382.44 | 27846.87 | 33279.13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 231 | 3 | 2 | 17.6022 | 0.854300955 | 1.069319512 | 2 | 1 | Control | Funisitis | BTB/POZ domaincontaining protein KCTD12 OS=Homo sapiens GN=KCTD12 PE=1 SV=1 | 26154.93 | 27911.99 | 24004.97 | 29445.65 | 21298.59 | 24609.44 | 24064.44 |
| 232 | 5 | 5 | 35.845 | 0.861269794 | 1.078980179 | 2 | 1 | Funisitis | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Myosin light polypeptide 6 OS=Homo sapiens <br> GN=MYL6 PE=1 SV=1 | 110217.5 | 80761.47 | 108619.5 | 95816.27 | 91780.09 | 93231.98 | 109180.8 |
| 233 | 8 | 4 | 60.1428 | 0.863455678 | 1.051497255 | 1 | 1 | Funisitis | Control | $\begin{aligned} & \text { Isoform } 3 \text { of Protein } \\ & \text { disulfide-isomerase A6 } \\ & \text { OS=Homo sapiens } \\ & \text { GN=PDIA6 } \end{aligned}$ | 45366.66 | 47618.74 | 49278.26 | 54938.99 | 44787.58 | 52525.32 | 45356.99 |
| 234 | 1 | 1 | 3.8743 | 0.864730684 | 1.416013104 | 1 | 1 | Control | No Funisitis | E3 ubiquitin-protein ligase TRIM13 OS=Homo sapiens GN=TRIM13 PE=1 SV=2 | 3460.339 | 1473.875 | 5373.805 | 2895.386 | 1957.686 | 2244.363 | 4227.104 |
| 235 | 5 | 1 | 41.4126 | 0.866109564 | 1.069148701 | 1;2 | 2 | No Funisitis | Funisitis | Isoform 2 of Beta-enolase OS=Homo sapiens $\mathrm{GN}=\mathrm{ENO} 3$ | 138350.8 | 138287.8 | 98592.46 | 127793.2 | 135250.7 | 121037.3 | 124993.9 |
| 236 | 7 | 1 | 45.5785 | 0.876908478 | 1.044976527 | 1 | 1 | No Funisitis | Funisitis | Isoform 2 of Heat shock protein HSP 90-alpha OS=Homo sapiens GN=HSP90AA1 | 28614.89 | 26033.65 | 31096.57 | 31271.34 | 27382.67 | 29055.96 | 27073.54 |
| 237 | 2 | 1 | 9.4007 | 0.880009277 | 1.13601636 | 1 | 1 | Funisitis | Control | Phosphatidylinositol 4phosphate 3-kinase C2 domain-containing subunit beta OS=Homo sapiens GN=PIK3C2B PE=1 SV=1 | 10519.16 | 19804.16 | 9829.908 | 16263.27 | 12293.67 | 18871.23 | 11538.59 |
| 238 | 15 | 14 | 52.4613 | 0.881481795 | 1.404644094 | 1;2 | 2 | Control | No Funisitis | Trypsin OS=Sus scrofa $\mathrm{PE}=1 \mathrm{SV}=1$ | 1738299 | 2626009 | 760673 | 1260190 | 1172208 | 1116800 | 1884831 |
| 239 | 5 | 3 | 27.2582 | 0.883548263 | 1.11564912 | 2 | 1 | Control | Funisitis | Isoform 3 of Coiled-coil domain-containing protein 91 OS=Homo sapiens GN=CCDC91 | 84276.82 | 85446.99 | 56923.01 | 60462.05 | 84110.11 | 65116.49 | 70318.45 |
| 240 | 15 | 5 | 109.0178 | 0.886126529 | 1.079959881 | 1;2 | 2 | Funisitis | Funisitis | Heat shock-related 70 kDa protein 2 OS=Homo sapiens GN=HSPA2 PE=1 $\mathrm{SV}=1$ | 22812.65 | 19115.08 | 29466.43 | 24661.48 | 24637.9 | 21195.81 | 24453.45 |
| 241 | 34 | 31 | 241.7267 | 0.888130839 | 1.056122443 | 1;2 | 2 | No Funisitis | Funisitis | Isoform 17 of Fibronectin OS=Homo sapiens GN=FN1 | 253362.9 | 230501.5 | 167052.2 | 228885.6 | 229395.1 | 206076.6 | 227851 |
| 242 | 2 | 2 | 10.9013 | 0.888682937 | 1.194311962 | 1 | 1 | Funisitis | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | $\begin{aligned} & \text { Calreticulin OS=Homo } \\ & \text { sapiens GN=CALR PE=1 } \\ & \text { SV }=1 \end{aligned}$ | 484504.5 | 354799.6 | 334084.1 | 253721.5 | 452760.2 | 280833 | 562926.5 |
| 243 | 5 | 1 | 36.5451 | 0.889478761 | 1.09073616 | 1 | 1 | Funisitis | Funisitis | Protein disulfide-isomerase A3 (Fragment) OS=Homo sapiens GN=PDIA3 PE=1 $\mathrm{SV}=1$ | 16016.57 | 21292.45 | 13004.32 | 19367.04 | 16186.74 | 17600.9 | 14995.24 |
| 244 | 59 | 9 | 331.4744 | 0.89172766 | 1.052685733 | 1;2 | 2 | No Funisitis | Control | Actin, alpha cardiac muscle 1 OS=Homo sapiens $\mathrm{GN}=\mathrm{ACTC} 1 \mathrm{PE}=1 \mathrm{SV}=1$ | 656979.5 | 718739.8 | 571685 | 759541.1 | 607128.7 | 664983.8 | 665048.2 |
| 245 | 4 | 1 | 13.3881 | 0.896283399 | 1.16153988 | 1;2 | 2 | Funisitis | Control | Histone H1.1 OS=Homo sapiens GN=HIST1H1A $\mathrm{PE}=1 \mathrm{SV}=3$ | 481.7546 | 1040.174 | 424.3304 | 1003.327 | 434.2404 | 922.2158 | 584.8892 |
| 246 | 16 | 15 | 120.6893 | 0.896473116 | 1.127913905 | 1;2 | 2 | No <br> Funisitis | Funisitis | $\begin{aligned} & \hline \text { Chorionic } \\ & \text { somatomammotropin } \\ & \text { hormone } 1 \text { OS }=\text { Homo } \\ & \text { sapiens GN=CSH1 PE=1 } \\ & \text { SV=1 } \\ & \hline \end{aligned}$ | 301461.7 | 472611.4 | 228530.6 | 346673.4 | 344727.3 | 319135.7 | 293855 |
| 247 | 3 | 2 | 17.3372 | 0.896497656 | 1.13547704 | 2 | 1 | No <br> Funisitis | Funisitis | Thioredoxin OS=Homo sapiens GN=TXN PE=1 | 117841.4 | 112570 | 67391.35 | 88402.42 | 125650.2 | 86695.92 | 101817.5 |


|  |  |  |  |  |  |  |  |  |  | $\mathrm{SV}=3$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 248 | 20 | 20 | 60.1271 | 0.901778735 | 1.049500018 | 1;2 | 2 | Funisitis | No Funisitis | Histone H3 (Fragment) OS=Homo sapiens $\mathrm{GN}=\mathrm{H} 3 \mathrm{~F} 3 \mathrm{~B}$ PE $=1 \mathrm{SV}=1$ | 515402.7 | 485910.2 | 664321.2 | 549991.6 | 543999 | 573488.5 | 574654.6 |
| 249 | 10 | 3 | 61.8127 | 0.904657595 | 1.072307765 | 1 1 | 1 | No Funisitis | Funisitis | Heat shock protein HSP 90 beta OS=Homo sapiens GN=HSP90AB1 PE=1 $\mathrm{SV}=4$ | 100531.4 | 71577.95 | 89004.82 | 105506.8 | 79646.38 | 91309.17 | 81358.82 |
| 250 | 2 | 2 | 12.1923 | 0.907146999 | 1.15648573 | 1 | 1 | Funisitis | No Funisitis | Serine/threonine-protein phosphatase (Fragment) OS=Homo sapiens GN=PPP1CA PE=1 SV=1 | 10781.14 | 5015.453 | 11033.55 | 7167.002 | 8834.792 | 8413.322 | 10092.52 |
| 251 | 1 | 1 | 5.3764 | 0.911023703 | 1.094525032 | 2 | 1 | Control | No <br> Funisitis | Ataxin-2 (Fragment) OS=Homo sapiens $\mathrm{GN}=\mathrm{ATXN} 2 \mathrm{PE}=1 \mathrm{SV}=3$ | 87909.84 | 66380.07 | 59887.97 | 41395.06 | 89059.02 | 49345.18 | 90460.3 |
| 252 | 1 | 1 | 5.8624 | 0.911478821 | 1.108248672 | 1 | 1 | Funisitis | No Funisitis | F-actin-capping protein subunit alpha-1 OS=Homo sapiens GN=CAPZA1 $\mathrm{PE}=1 \mathrm{SV}=3$ | 13212.55 | 8886.227 | 17085.44 | 11534.54 | 12637.48 | 12796.15 | 13992.47 |
| 253 | 8 | 6 | 59.5677 | 0.913676367 | 1.065096691 | 1;2 | 2 | Control | Funisitis | $\begin{aligned} & \text { Isoform } 3 \text { of L-lactate } \\ & \text { dehydrogenase A chain } \\ & \text { OS=Homo sapiens } \\ & \text { GN=LDHA } \end{aligned}$ | 45060.24 | 41610.67 | 57859.07 | 52439.63 | 38916.87 | 47737.26 | 42727.13 |
| 254 | 11 | 4 | 96.2579 | 0.915913885 | 1.326217554 | 1;2 | 2 | Control | Funisitis | 14-3-3 protein gamma OS=Homo sapiens $\mathrm{GN}=\mathrm{YWHAG}$ PE=1 SV=2 | 35785.03 | 94936.54 | 28513.61 | 46148.12 | 49147.64 | 45053.6 | 34991.17 |
| 255 | 2 | 1 | 11.9577 | 0.91680663 | 1.10765191 | 1 | 1 | No Funisitis | Funisitis | Cohesin subunit SA-2 OS=Homo sapiens GN=STAG2 PE=1 SV=3 | 7729.472 | 18560.47 | 20459.17 | 18555.35 | 14937.72 | 16647.88 | 13590.02 |
| 256 | 6 | 6 | 47.9452 | 0.918403247 | 1.066026306 | 1;2 | 2 | Control | No <br> Funisitis | $\begin{aligned} & \text { Cathepsin G OS=Homo } \\ & \text { sapiens GN=CTSG PE=1 } \end{aligned}$ $\mathrm{SV}=2$ | 111383.2 | 81972.73 | 116665.1 | 95432.49 | 98447.03 | 93992.67 | 110540.7 |
| 257 | 5 | 4 | 32.6713 | 0.919546505 | 1.044761079 | 1 | 1 | Funisitis | Control | $\begin{aligned} & \text { Cathepsin D OS=Homo } \\ & \text { sapiens GN=CTS PE }=1 \\ & \text { SV }=1 \end{aligned}$ | 49489.33 | 42752.95 | 66967.11 | 55597.44 | 53135.7 | 58451.14 | 52439.38 |
| 258 | 7 | 2 | 63.1633 | 0.920031274 | 1.086425598 | 1 | 1 | Control | No Funisitis | $\begin{aligned} & \text { Peripherin OS=Homo } \\ & \text { sapiens GN=PRPH PE=1 } \\ & \text { SV=2 } \end{aligned}$ | 19392.56 | 12784.86 | 18674.91 | 14706.21 | 16498.46 | 14718.62 | 17709.42 |
| 259 | 22 | 2 | 105.1757 | 0.921478128 | 1.038992526 | 1;2 | 2 | No Funisitis | Control | Histone H2B type 1-K OS=Homo sapiens $\mathrm{GN}=\mathrm{HIST} 1 \mathrm{H} 2 \mathrm{BK}$ PE=1 SV=3 | 457494.1 | 477639.7 | 337908.7 | 460849.5 | 420938.3 | 442590.3 | 426216.9 |
| 260 | 5 | 5 | 44.3923 | 0.921956768 | 1.044485846 | 1 | 1 | No Funisitis | Control | Elongation factor 1-alpha 1 OS=Homo sapiens GN=EEF1A1 PE=1 SV=1 | 42709.18 | 52755.7 | 51647.76 | 56937.39 | 45500.66 | 51957.09 | 48506.34 |
| 261 | 2 | 2 | 8.8928 | 0.922363519 | 1.042718764 | 1 | 1 | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | Control | RAC-beta serine/threonineprotein kinase OS=Homo sapiens GN=AKT2 PE=1 $\mathrm{SV}=2$ | 87141.93 | 88072.32 | 60817.63 | 84090.86 | 79985.71 | 79937.28 | 78732.63 |
| 262 | 4 | 1 | 14.487 | 0.927205861 | 1.123888714 | 2 | 1 | Funisitis | No <br> Funisitis | mRNA turnover protein 4 homolog OS=Homo sapiens GN=MRTO4 PE=1 $\mathrm{SV}=2$ | 78260.57 | 56932.66 | 52645.76 | 45903 | 66531.05 | 42775.71 | 83587.65 |
| 263 | 1 | 1 | 4.4387 | 0.928684533 | 1.152628329 | 1 | 1 | No Funisitis | Funisitis | Endothelin-1 receptor OS=Homo sapiens GN=EDNRA $\mathrm{PE}=1 \mathrm{SV}=1$ | 18643.28 | 36873.05 | 7446.817 | 25803.78 | 17471.69 | 20719.35 | 16825.69 |
| 264 | 3 | 2 | 15.5754 | 0.931850028 | 1.192771248 | 2 | 1 | Funisitis | No Funisitis | $\begin{aligned} & \text { Azurocidin OS=Homo } \\ & \text { sapiens GN=AZU1 PE=1 } \\ & \text { SV=3 } \end{aligned}$ | 18080.73 | 9876.937 | 11108.76 | 9470.994 | 15490.04 | 9639.942 | 20132.86 |
| 265 | 10 | 9 | 39.6439 | 0.93571854 | 1.042096093 | 2 | 1 | Control | No Funisitis | $\begin{aligned} & \text { Ankyrin-3 OS=Homo } \\ & \text { sapiens GN=ANK3 PE=1 } \\ & \text { SV=3 } \end{aligned}$ | 142428.5 | 121287.3 | 112890.8 | 112346 | 128582.9 | 112191.2 | 134237.5 |


| 266 | 3 | 1 | 14.8845 | 0.937680583 | 1.037016609 | 1 | 1 | Funisitis | Control | Isoform Pax3G of Paired box protein Pax-3 OS=Homo sapiens GN=PAX3 | 475279.8 | 379226.4 | 327218.1 | 374169.3 | 416877.5 | 387738.8 | 429239.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 267 | 48 | 31 | 201.2852 | 0.938189594 | 1.068892493 | 1 | 1 | No Funisitis | Funisitis | Isoform 12 of Titin OS=Homo sapiens GN=TTN | 357616.8 | 523401.2 | 232639.5 | 414124.2 | 364561.6 | 413378.1 | 315119.6 |
| 268 | 3 | 3 | 17.8785 | 0.940489912 | 1.059082719 | 2 | 1 | Control | Funisitis | Actin-related protein $2 / 3$ complex subunit 4 OS=Homo sapiens $\mathrm{GN}=\mathrm{ARPC} 4 \mathrm{PE}=1 \mathrm{SV}=1$ | 37588.54 | 31535.28 | 27061.68 | 25832.75 | 35883.34 | 25776.32 | 34770.1 |
| 269 | 6 | 4 | 64.2009 | 0.959343661 | 1.028695378 | 1;2 | 2 | No <br> Funisitis | Control | Ig kappa chain C region OS=Homo sapiens GN=IGKC PE=1 SV= | 116698 | 99569.73 | 108718.1 | 105058.7 | 117815.6 | 96481.14 | 122902.5 |
| 270 | 3 | 2 | 16.3346 | 0.960126127 | 1.02215502 | 1 1 | 1 | No <br> Funisitis | Control | Rab GDP dissociation inhibitor alpha OS=Homo sapiens $\mathrm{GN}=\mathrm{GDII} \mathrm{PE}=1$ $\mathrm{SV}=2$ | 61668.91 | 53586.16 | 69347.58 | 66455 | 59340.02 | 60958.86 | 62244.8 |
| 271 | 1 | 1 | 11.5806 | 0.961953119 | 1.025822781 | 2 | 1 | Funisitis | $\begin{aligned} & \text { No } \\ & \text { Funisitis } \end{aligned}$ | 10 kDa heat shock protein, mitochondrial OS=Homo sapiens GN=HSPE1 PE=1 $\mathrm{SV}=2$ | 38990.15 | 50746.04 | 42634.98 | 43948.58 | 42154.18 | 44046.08 | 44280.09 |
| 272 | 35 | 24 | 348.8489 | 0.967029613 | 1.039727338 | 1;2 | 2 | Funisitis | Funisitis | $\begin{aligned} & \text { Vimentin OS=Homo } \\ & \text { sapiens GN=VIM PE=1 } \\ & \text { SV=4 } \end{aligned}$ | 614101.8 | 887437.8 | 368326.2 | 661044.8 | 603473.7 | 556190.9 | 660011 |
| 273 | 1 | 1 | 3.564 | 0.976087701 | 1.0333781 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Hemicentin-2 OS=Homo } \\ & \text { sapiens GN=HMCN2 PE=1 } \\ & \text { SV=1 } \end{aligned}$ | 61192.51 | 46504.94 | 73807.61 | 58711.94 | 61502.07 | 47249.82 | 69845.15 |
| 274 | 6 | 5 | 35.1493 | 0.979772647 | 1.086176409 | 1 | 1 | Control | No Funisitis | Phosphoglycerate kinase 1 OS=Homo sapiens $\mathrm{GN}=\mathrm{PGK} 1 \mathrm{PE}=1 \mathrm{SV}=3$ | 42049.04 | 29608.5 | 57813.07 | 39746.1 | 39719.57 | 36069.58 | 45640.49 |
| 275 | 5 | 3 | 27.0607 | 0.984407632 | 1.044644964 | 1 | 1 | Control | Funisitis | Histone H1.3 OS=Homo sapiens GN=HIST1HID PE=1 SV=2 | 28904.95 | 57006.25 | 25572.26 | 41056.54 | 32768.61 | 41902.67 | 29243.33 |
| 276 | 2 | 2 | 13.7943 | 0.984642404 | 1.026230904 | 2 | 1 | Control | Funisitis | Isoform USP25b of Ubiquitin carboxyl-terminal hydrolase 25 OS=Homo sapiens GN=USP25 | 17154.05 | 12661.45 | 15774.1 | 13977.47 | 15893.11 | 13625.69 | 15990.52 |
| 277 | 11 | 10 | 79.4372 | 0.992585304 | 1.013270244 | 1 | 1 | Control | Funisitis | $\begin{aligned} & \text { Lactotransferrin OS=Homo } \\ & \text { sapiens GN=LTF PE=1 } \\ & \text { SV=6 } \end{aligned}$ | 133830.3 | 113489.4 | 144800.8 | 137704.5 | 120315.8 | 129854.7 | 128135.3 |
| 278 | 1 1 | 0 | 5.0276 |  | 1 1 | 2 | 1 | - | - | NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 12 OS=Homo sapiens GN=NDUFA12 PE=1 SV=1 |  |  |  |  |  |  |  |
| 279 | 2 | 0 | 14.3206 |  | 1 | 1 | 1 | --- | --- | Probable ATP-dependent RNA helicase YTHDC2 OS=Homo sapiens GN=YTHDC2 PE=1 SV=2 |  |  |  |  |  |  |  |
| 280 | 38 | 0 | 203.4723 |  | 1 | 1;2 | 2 | --- | --- | $\begin{aligned} & \text { POTE ankyrin domain } \\ & \text { family member E } \\ & \text { OS=Homo sapiens } \\ & \text { GN=POTEE PE }=1 \text { SV=3 } \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |
| 281 | 1 | 0 | 9.9018 |  | 1 | 1 | 1 | --- | --- | Core-binding factor subunit beta OS=Homo sapiens $\mathrm{GN}=\mathrm{CBFB}$ PE $=1 \mathrm{SV}=2$ |  |  |  |  |  |  |  |
| 282 | 2 | 0 | 18.1838 |  | 1 | 1 | 1 | --- | --- | Keratin, type II cytoskeletal 75 OS=Homo sapiens <br> $\mathrm{GN}=$ KRT75 $\mathrm{PE}=1 \mathrm{SV}=2$ |  |  |  |  |  |  |  |
| 283 | 37 | 0 | 181.1994 |  | 1 | 1;2 | 2 | --- | --- | POTE ankyrin domain family member $F$ OS=Homo sapiens |  |  |  |  |  |  |  |



Appendices


## Appendix 8: Pilot study

## Introduction

Within the study, around $15-20 \%$ of causes of death could have been allocated from the antenatal history; with either the autopsy confirming what was clinically suspected or providing no additional information. In view of this, together with the large proportion of unexplained deaths within the study ( $63 \%$ ), it was suggested by the examiners at the viva that a small pilot study was needed to assess concordance of important clinical details being present in the postmortem pack (provided for the autopsy) compared to the antenatal notes themselves. The cases used within the original study were non-identifiable based on study number only, hence those cases could not be used to review the original antenatal notes. To address this issue, a small audit study was performed using recent cases.

## Methods

Perinatal deaths from University College London Hospital (UCLH) were selected from 2014/2015 in which the autopsies were completed at Great Ormond Street Hospital.

Details from these new cases were also entered into the Microsoft Access database that was used in the original study for consistency and ease of analysis. The antenatal clinical notes were reviewed for each case at UCLH and comparisons were made between the clinical details provided in the postmortem pack and the antennal clinical notes for major categories using Microsoft Excel.

## Results

In total, 21 cases were selected for analysis, including five miscarriages, one stillbirth, three neonatal deaths and 12 terminations of pregnancies for fetal abnormality (Figure 1).

The majority of deaths ( $57 \%$ ) were attributed to congenital abnormalities including organ, skeletal and genetic abnormalities (Table 1), corresponding to the number of terminations within the sample with other deaths classified as ascending infection, abruption, chronic lung disease and unexplained (Figure 2).


Figure 1: Proportion of different types of fetal death

| Cause of death | Number of cases |
| :--- | :---: |
| Ascending Infection | $3(14 \%)$ |
| Abruption | $1(5 \%)$ |
| Chronic Lung disease | $1(5 \%)$ |
| Congenital Abnormalities | $12(57 \%)$ |
| Unexplained | $4(19 \%)$ |

## Total

21
Table 1: Proportion of cases with different causes of death


Figure 2: Proportion of each type of death within each cause of death
In all of the cases reviewed, the post-mortem pack information failed to provide a complete and detailed antenatal history. Missing information from the postmortem (PM) pack included: antenatal blood test results; history of antenatal dating and anomaly ultrasound scan results; maternal ethnicity; maternal smoking status; maternal obstetric history and fetal birth weight (Table 2).

| Missing data | Complete Information not available from PM pack |
| :--- | :---: |
| Antenatal blood tests | 18 out of $18(100 \%)$ |
| Ultrasound scans | 13 out of $18(72 \%)$ |
| Maternal BMI | 7 out of $18(39 \%)$ |


| Maternal Ethnicity | 8 out of $18(44 \%)$ |
| :--- | :--- |
| Maternal Smoking status | 5 out of $18(28 \%)$ |
| Maternal Obstetric history | 3 out of $18(17 \%)$ |
| Fetal Birth weight | 5 out of $18(28 \%)$ |

Table 2: Missing data from postmortem pack
18 out of 21 clinical notes were available for review at UCLH. $66 \%$ of the missing data items were provided by review of the full antenatal clinical notes: $100 \%$ of maternal obstetric history and maternal smoking status was achieved through review of the notes, however, the clinical notes did not provide the missing fetal birth weight data. The remainder of missing data was found in the clinical notes in $57-75 \%$ of cases (Figure 3).


Figure 3: Proportion of cases in which missing data was found on review of clinical notes.

However, on review of the cases, with the additional clinical information, no effect was found on the cause of death provided at autopsy. All clinically relevant information had been included in the original postmortem pack with no causes of death altered based on full review of the clinical notes.

## Discussion

This small audit study demonstrates that in all cases of perinatal deaths undergoing autopsy, an incomplete antenatal history was provided, including the absence of results such as antenatal blood tests and ultrasound scans. Most of this missing data was available on review of the clinical notes, but this additional information had no effect on the cause of death, indicating that important aspects of the antenatal history had been included within the postmortem pack.

These findings would suggest that, although not complete, the details provided routinely at the time of autopsy request, within the postmortem pack are sufficient to aid the pathologist in the attribution of cause of death. Cases which were unexplained within the main study are therefore likely to have remained unexplained regardless of whether the full antenatal details were available.

The additional benefits of the extra information provided by review of the full clinical notes would be for research studies looking for trends in data and relationships between antenatal history, such as maternal obstetric history, Body Mass Index and type or cause of death, rather than the determination of the overall cause of death.

There are limited data based on adult studies, evaluating clinical cause of death and cause of death attributed after autopsy with around $20 \%$ of cases having unexpected findings (1-5). This would suggest that whilst clinical information remains important, autopsy can identify pathologies missed clinically in the adult patient. The differences between these cases and fetal deaths are that the majority of patients in the aforementioned studies were long term patients on Intensive Care Units and thus there was time for clinicians to establish a suitable reason for death, with concurrent clinical investigations, which in most cases led to the true cause of death, whilst most intrauterine deaths are clinically unsuspected. Much research is still needed in the field of antenatal and fetal pathology to establish why so many stillbirths and miscarriages remain unexplained but the current audit suggest that additional clinical information provision is unlikely to significantly affect the rate of unexplained stillbirth.

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