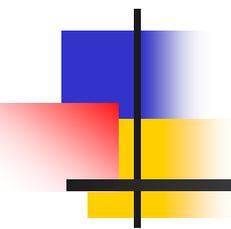


QAPonline

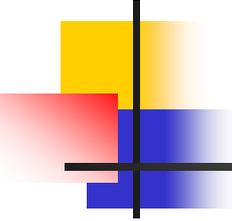


Tutorial for Quality Assurance
scheme for Ultrasound.

Before you start.....

- This tutorial is designed to be used AFTER the general tutorial on using QAPonline. Please complete the general tutorial first since this explains the process for registration and enrolment.

Select	Scheme Number and Title	Comment/Experience
USE2006	Endometrial Thickness-2006	Not Identified-[Ultrasound] / 1990-16 years
	USE2006, Ultrasound [7/09/2006]	-Enrolled at Professional level [Linked to QAP Company#=417]
USF2006	Follicle Diameter-2006	Not Identified-[Ultrasound] / 1990-16 years
	USF2006, Ultrasound [7/09/2006]	-Enrolled at Professional level [Linked to QAP Company#=417]



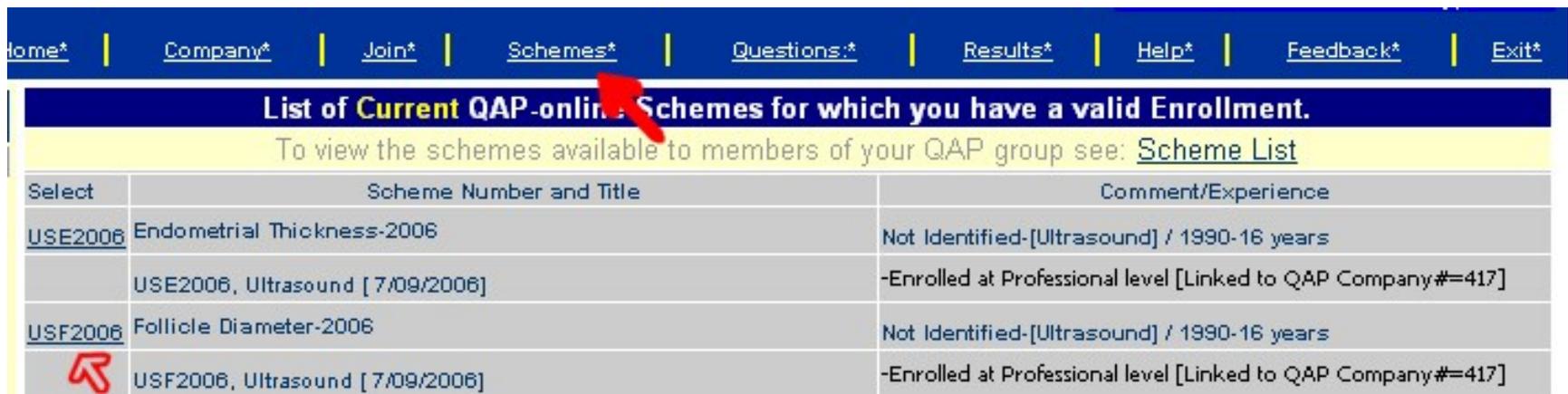
Joining a US QA Scheme

- Once your clinic/company has registered and subscribed, you should see the ultrasound schemes listed on the company page. Select Enrol and complete the details requested.

	<u>Enrol</u>	Endometrial Thickness-2006
	<u>Enrol</u>	Follicle Diameter-2006

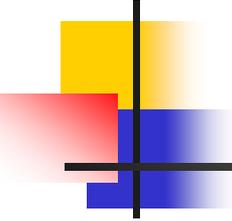
Access the US scheme....

- Once enrolled, the Follicle schemes are accessed via the Schemes Option found in the Upper menu. Select the US QA Scheme.



The screenshot shows a web application interface. At the top is a dark blue navigation bar with white text links: Home*, Company*, Join*, Schemes*, Questions*, Results*, Help*, Feedback*, and Exit*. Below this is a dark blue header with white text: "List of Current QAP-online Schemes for which you have a valid Enrollment." A red arrow points to the "Schemes*" link in the menu bar and the "List of Current QAP-online Schemes" text in the header. Below the header is a yellow banner with black text: "To view the schemes available to members of your QAP group see: [Scheme List](#)". Below the banner is a table with three columns: "Select", "Scheme Number and Title", and "Comment/Experience". The table contains four rows of data. A red arrow points to the "USE2006" link in the first row, and another red arrow points to the "USF2006" link in the third row.

Select	Scheme Number and Title	Comment/Experience
USE2006	Endometrial Thickness-2006	Not Identified-[Ultrasound] / 1990-16 years
	USE2006, Ultrasound [7/09/2006]	-Enrolled at Professional level [Linked to QAP Company#=417]
USF2006	Follicle Diameter-2006	Not Identified-[Ultrasound] / 1990-16 years
	USF2006, Ultrasound [7/09/2006]	-Enrolled at Professional level [Linked to QAP Company#=417]



Monthly Instalments.

- The list of monthly instalments are displayed. Each month, a single follicle is assessed for diameter. Select a monthly instalment.

Description		
Select	Title	Comment
USF2006.01	Follicle Diameter	Estimate the diameter of the follicle # D - [Available: 1 / 2006]
USF2006.02	Follicle Diameter.	Estimate the diameter of follicle A - [Available: 2 / 2006]
USF2006.03	Follicle Diameter.	Estimate the diameter of follicle E. - [Available: 3 / 2006]
USF2006.04	Follicle diameter	Estimate the diameter of the follicle A - [Available: 4 / 2006]
USF2006.05	Follicle Diameter	Estimate the diameter of follicle B. - [Available: 5 / 2006]
USF2006.06	Follicle Diameter.	Estimate the diameter of follicle C. - [Available: 6 / 2006]
USF2006.07	Follicle Diameter.	Estimate the diameter of follicle D. - [Available: 7 / 2006]

Monthly Instalment....

The screenshot shows a web-based quiz interface. On the left is a vertical menu with options like 'Quiz Options', 'Image', 'Open Slide Show', 'Questions', 'Submit Replies', 'Answers', 'Add Comment', 'Review Comments', 'Assessment Rules', 'Navigation', 'Installments', 'Enrolments', 'Scheme Options', 'Menu Info', 'Enrollments', 'Information', 'Structure', 'Description', and 'Installments'. The main content area has a blue header with 'Code: USF2006.01 - [Title:Follicle Diameter] Released:1/2006 Page 3'. Below this is a 'QAP Comment' that reads 'Estimate the diameter of the follicle # D'. A question box contains the text 'What is the diameter (in mm) of the follicle:' followed by a dropdown menu and a 'Select Question' button. A red arrow points to the 'Select Question' button. Below the question is an ultrasound image of a follicle with a yellow 'D' marking its diameter. Above the image are instructions: '1. Use Arrows to select Best Image', '2. Define Std Measure 10 mm', and '3. Est Size by clicks on sides of follicle'. The image has a vertical scale on the right with markings at -5, -10, and -15. At the bottom of the image is the copyright notice '© Copyright FertAid Pty Ltd 14/14'.

- The monthly instalment is displayed including..
- An animated file of the whole ovary
- Slide show for you to review.
- Question to select.

Monthly Instalments...

- The animated images shows you all the images through the whole ovary and is for illustration purposes only.

The screenshot shows a web-based quiz interface. On the left is a vertical menu with various options like 'Quiz Options', 'Image', 'Open Slide Show', 'Questions', 'Questions+Image', 'Submit Replies', 'Answers', 'Add Comment', 'Review Comments', 'Assessment Rules', 'Navigation', 'Installments', 'Enrolments', 'Scheme Options', 'Menu Info', 'Enrollments', 'Information', 'Structure', 'Description', and 'Installments'. The main content area has a blue header with 'Code: USF2006.01 - [Title:Follicle Diameter] Released:1/2006 Page 3'. Below this is a green bar with 'QAP Comment: "Estimate the diameter of the follicle # D'. A question box contains the text 'What is the diameter (in mm) of the follicle.' and a 'Select Question' button. A red arrow points to this button. Below the question is an ultrasound image titled 'Follicle QA' with instructions: '1. Use Arrows to select Best Image', '2. Define Std Measure', and '3. Est Size by clicks on sides of follicle'. The image shows a follicle labeled 'D' with a yellow arrow pointing to its diameter. A scale on the right of the image ranges from -5 to -15. A yellow arrow points to the follicle. A red arrow points to the 'Select Question' button. At the bottom of the image, it says '© Copyright FertAid Pty Ltd 14/14'.

Monthly Instalments...

- The slide show is also for review purposes only. They are there to allow you to see where the nominated follicle fits into the order of things. To do the question, select **SELECT QUESTION**.

The screenshot displays a quiz interface with a sidebar on the left and a main content area on the right. The sidebar contains a list of menu items: Quiz Options, Quiz Menu Info, Image, Open Slide Show (highlighted in red), Questions, Questions+Image, NEW! Submit Replies, Answers, Add Comment, Review Comments, Assessment Rules, Navigation, Installments, Enrolments, Scheme Options, Menu Info, Enrollments, Information, Structure, Description, and Installments. The main content area has a blue header with the text 'Code: USF2006.01 - [Title:Follicle Diameter] Released:1/2006 Page 3'. Below the header is a green bar with the text 'QAP Comment: "Estimate the diameter of the follicle # D'. A yellow arrow points to the 'Open Slide Show' link in the sidebar. A red arrow points to the 'Select Question' button in the main content area. The main content area also features a dropdown menu with the text 'What is the diameter (in mm) of the follicle.' and a 'Select Question' button. Below this is a large ultrasound image titled 'Follicle QA' with instructions: '1. Use Arrows to select Best Image', '2. Define Std Measure 10 mm', and '3. Est Size by clicks on sides of follicle'. The image shows a follicle labeled 'D' with a measurement line. The copyright notice '© Copyright FertAid Pty Ltd 14/14' is visible at the bottom of the image.

Monthly Instalment....

- Selecting the question opens the QA assessment.

The screenshot displays the QAPonline Follicle QA interface. On the left is a vertical control panel with the following elements:

- Options
- QuizOptions
- Information
- Image
- Select best Image
- Previous Image (with an up arrow icon)
- Next Image (with a down arrow icon)
- Use Arrows to select best image
- Current Image=1/16
- Select Image (button)

The main display area on the right features a black header bar with the following text:

Image ID= 1/16 - - Scheme:USF2006.01 - Follicle Diameter Q:Estimate the diameter of

QAPonline Follicle QA 1. Use Arrows to select Best Image 2. Define Std Measure 3. Est Size by clicks on sides of follicle

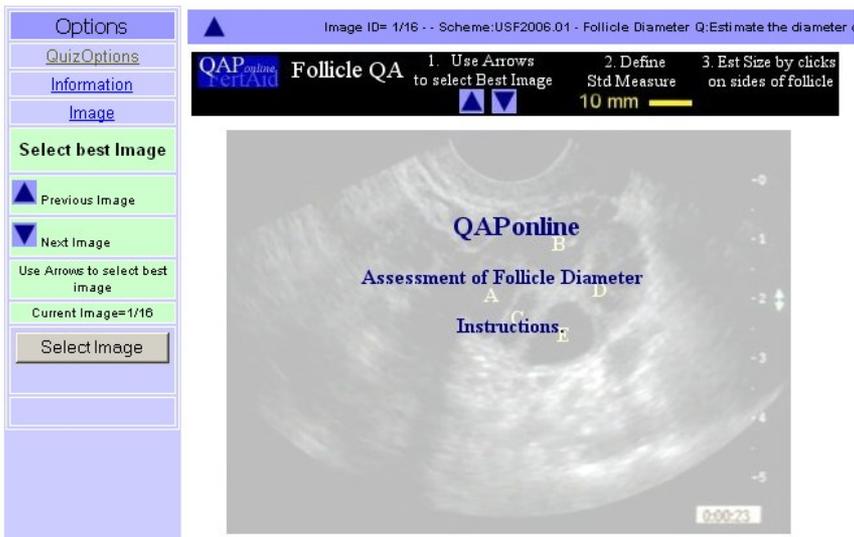
10 mm

The main image is a grayscale ultrasound scan of a follicle. It contains the following text and markers:

- QAPonline
- B
- Assessment of Follicle Diameter
- A
- C
- D
- Instructions
- E

A vertical scale on the right side of the image ranges from -0 to -5. A timestamp '0:00:23' is visible in the bottom right corner.

Monthly Instalment....



- Pause for a moment to understand the way QAP-US works.
- In a working environment, the scanner moves the probe over the follicle until the “best” image is found and then the image is frozen.

Monthly Instalment....

Options

Quiz Options

Information

Image

Select best Image

▲ Previous Image

▼ Next Image

Use Arrows to select best image

Current Image=1/16

Select Image

Image ID= 1/16 - - Scheme:USF2006.01 - Follicle Diameter Q:Estimate the diameter

QAPonline Follicle QA 1. Use Arrows to select Best Image 2. Define Std Measure 3. Est Size by clicks on sides of follicle

▲ ▼ 10 mm

QAPonline

B

Assessment of Follicle Diameter

A C D

Instructions E

00028

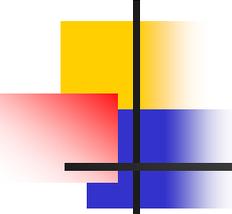
In QAPonline, the video image has been broken down into a number of static images.

- To select the “Best” image, you need to use the blue arrows to navigate between the images to select the image that you think portrays the follicle at is “Best”.

Selecting the Best Image...



- Use the Up and Down blue arrows to select the image that you consider best reflects the best diameter to measure.
- When happy select "SELECT IMAGE" to lock the image in place for measurement.



Selecting the Best Image...

Select best Image

▲ Previous Image

▼ Next Image

Use Arrows to select best image

Current Image=13/16

Select Image

- The counter on the panel tells you which image you are looking at.
- Press the SELECT IMAGE button when the best image is found.

Multiple Images to chose from..

Select best Image

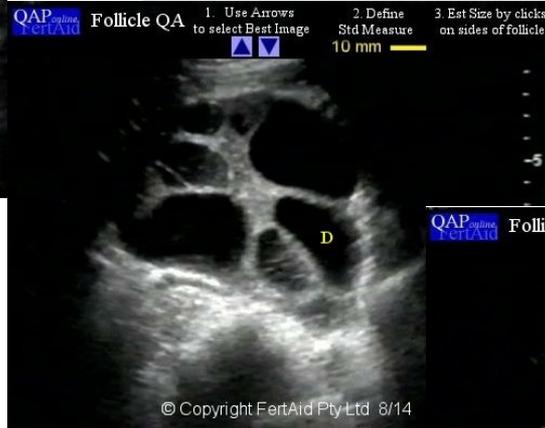
▲ Previous Image

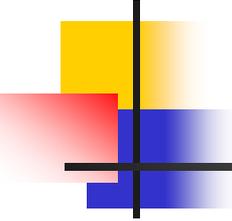
▼ Next Image

Use Arrows to select best image

Current Image=13/16

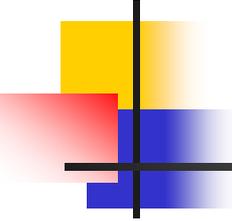
Select Image





How QAPonline - US works.

- QAPonline US works in the following order.
 1. Estimating the diameter by performing a mouse click on either edge of the object eg a follicle
 2. The system estimates the distance between the 2 mouse clicks as a length in pixels.
 3. It compares the length in pixels to a standard length
 4. Calculates the diameter in millimetres.
 5. The system allows up to 4 estimates that it averages.
 6. The final, averaged value is submitted.



How QAPonline - US works.

- QAPonline US therefore seeks to simulate the normal procedure for determining follicle or other object lengths by
 1. Scanning through series of images
 2. Selecting an image of best diameter
 3. Moving the pointer both sides of the follicle
 4. Reading the length.
 5. So how to do this with QAPonline - US

Estimating the standard length.

Options

[QuizOptions](#)

[Information](#)

[Image](#)

You have selected Image # 13/16

Std length= 10 mm

Click on Select for Std Measure and then click on both ends of the measure bar.

Select for Std Measure

Std Length



1. Once the image has been selected, you now need to define a standard length. For US the standard length is 10mm.
2. First select "Select for Std Measure"

Estimating the standard length.

The screenshot displays the QAPonline Follicle QA software interface. At the top, a status bar shows 'Image ID= 1/16 -- Scheme:USF2006.01 - Follicle Diameter Q:Estimate the diameter'. The main window is titled 'Follicle QA' and contains three numbered instructions: '1. Use Arrows to select Best Image', '2. Define Std Measure', and '3. Est Size by clicks on sides of follicle'. A yellow horizontal bar is visible across the follicle image, with a '10 mm' scale bar below it. The interface includes a left sidebar with 'Options', 'QuizOptions', 'Information', and 'Image' sections, and a bottom status bar showing 'Current Image=1/16' and '0:00:23'.

- Click ONCE on the left side of the yellow space bar
- Click once on the right side of the space bar.
- This write the screen coordinates to the panel

Estimating the standard length.

Record Measurement

Distance Calculator: From point A to point B

Distance For Unit Measure Estimation

Click once on one side of the standard measure bar (usually yellow line) and a second time on the other side of the bar and the screen coordinates will appear on this table below. If OK then select "Add this estimate to my answer." This will define what 1 cm is in screen pixels

(x_A ,)

(y_A ,)

(x_B ,)

(y_B ,)

Distance:

Calc No:

- Each mouse click completes the screen coordinates for the click.
- After both clicks, the 4 boxes contain the x,y coordinates for both clicks.
- Select "Record Measurements." to lock this distance in place.

Record Measurement

Distance Calculator: From point A to point B

Distance For Unit Measure Estimation

Click once on one side of the standard measure bar (usually yellow line) and a second time on the other side of the bar and the screen coordinates will appear on this table below. If OK then select "Add this estimate to my answer." This will define what 1 cm is in screen pixels

(x_A ,)

(y_A ,)

(x_B ,)

(y_B ,)

Distance:

Calc No:

Estimating the follicle diameter....

Options

[QuizOptions](#)

[Information](#)

[Image](#)

You have selected Image #
13/16

Std length= 10 mm

Now select an Estimate and press Calculate Distance and measure both end of the object of interest. Then select Submit Estimate.

Calculation of size.
Calculate diameter

Std Length 10.0mm
35

1st Estimate 0.0mm
0

2nd Estimate 0.0mm
0

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter
is: **0.0mm**

- The system now knows that the distance of the yellow bar is 10mm
- To make the first follicle diameter estimate, select the radio button for "first estimation."
- Now select "CALCULATE DISTANCE"

Calculation of size.
Calculate diameter

Std Length 10.0mm
35

1st Estimate 0.0mm
0

2nd Estimate 0.0mm
0

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter
is: **0.0mm**

Estimating the follicle diameter.

Calculation of size.

Calculate diameter

Std Length 10.0mm
35

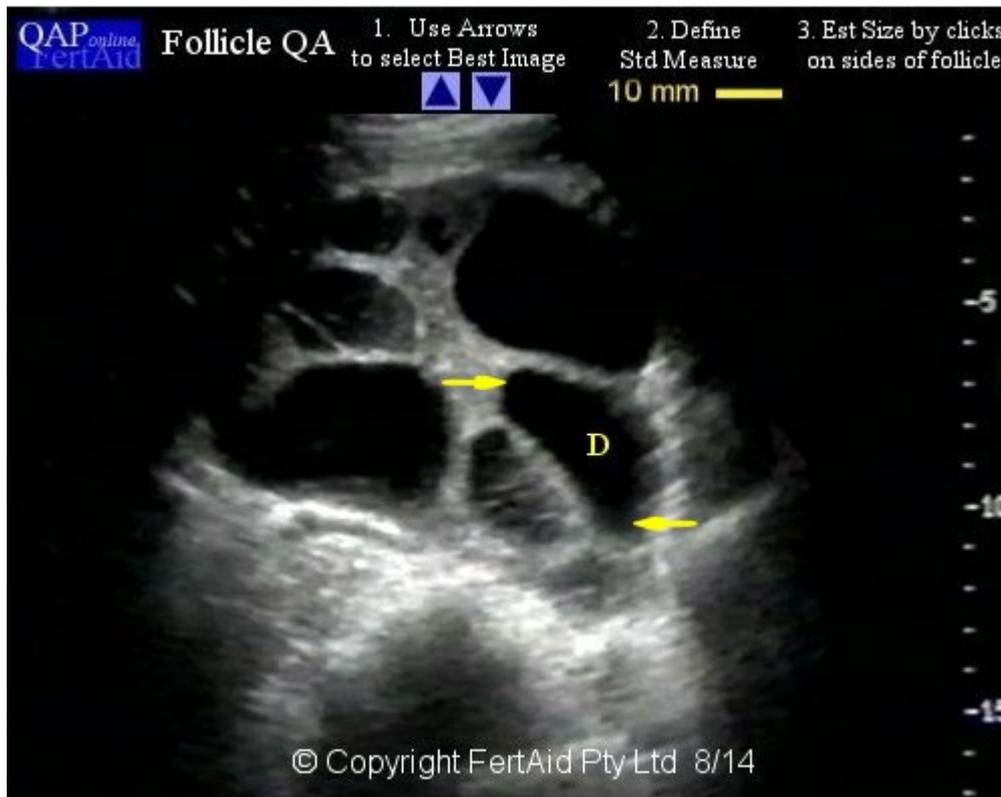
1st Estimate 0.0mm
0

2nd Estimate 0.0mm
0

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter is: **0.0mm**



Record Measurement

Distance Calculator: From point A to point B

Distance For First Estimation

Click once on one side of the object to be measured and a second time on the other side of the object and the screen coordinates will appear on this table below. If OK then select "Add this estimate to my answer"

(x_A) 496

y_A) 181

(x_B) 563

y_B) 241

Distance:
89.9388681271896

Calc No:
1

Estimating the follicle diameter....

- One click on the left, one click on the right...

Calculation of size.

Calculate diameter

Std Length 10.0mm
35

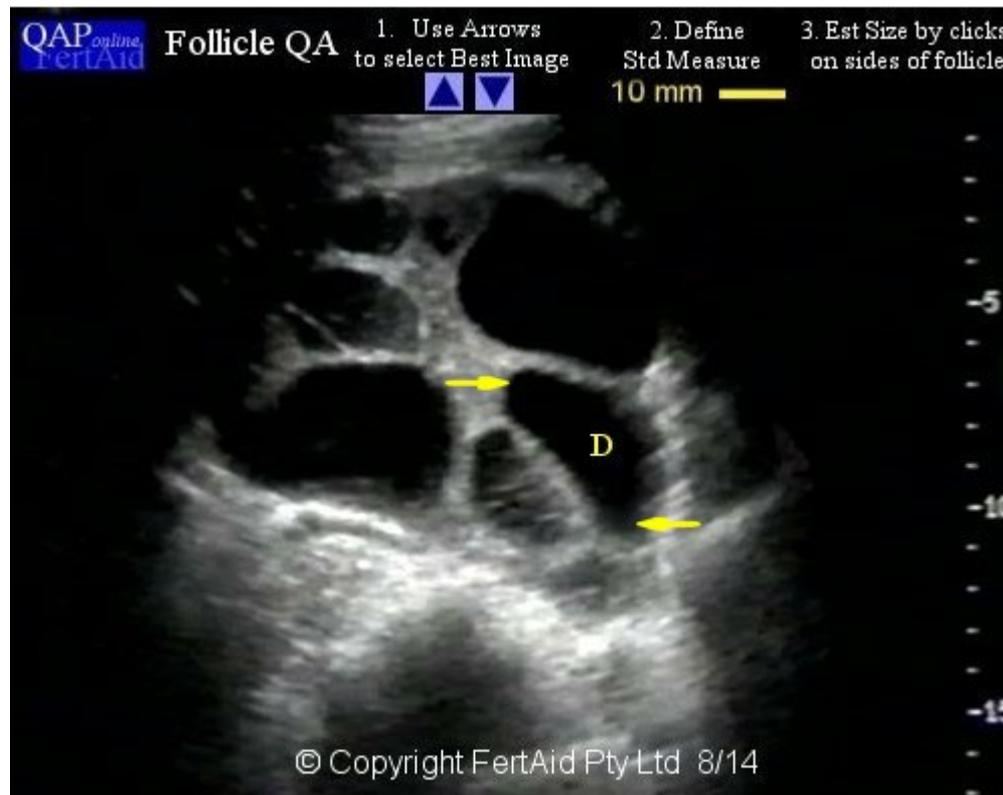
1st Estimate 0.0mm
0

2nd Estimate 0.0mm
0

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter is: **0.0mm**



Record Measurement

Distance Calculator: From point A to point B

Distance For First Estimation

Click once on one side of the object to be measured and a second time on the other side of the object and the screen coordinates will appear on this table below. If OK then select "Add this estimate to my answer"

(x_A, 496

y_A 181

(x_B, 563

y_B 241

Distance:
89.9388681271896

Calc No:
1

Estimating the follicle diameter....

Record Measurement

Distance Calculator: From point A to point B

Distance For First Estimation

Click once on one side of the object to be measured and a second time on the other side of the object and the screen coordinates will appear on this table below. If OK then select "Add this estimate to my answer"

(x_A) 496

(y_A) 181

(x_B) 563

(y_B) 241

Distance:
89.9388681271896

Calc No:
1

- One click on either side of the follicle marks the distance to be estimated.
- The screen coordinates are written into the x,y boxes.
- Select Record measurement to lock this value into place..

Std length= 10 mm

Your Average answer is
25.7

Submit your answer

Calculation of size.
Calculate diameter

Std Length 10.0mm
35

1st Estimate 25.7mm
90

2nd Estimate 0.0mm
0

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter is: **25.7mm**

Estimating the follicle diameter....

Std length= 10 mm

Your Average answer is
25.7

Submit your answer

Calculation of size.

Calculate diameter

Std Length 10.0mm
35

1st Estimate 25.7mm
90

2nd Estimate 0.0mm
0

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter
is: **25.7mm**

- The system then estimates the length in pixels between the 2 sides of the follicle.
- Compares this to the standard length and then estimates the diameter in mm
- Writes the follicle diameter in the answer box at the top.

Estimating the follicle diameter....

Std length= 10 mm

Your Average answer is
25.7

Submit your answer

Calculation of size.
Calculate diameter

Std Length 10.0mm
35

1st Estimate 25.7mm
90

2nd Estimate 0.0mm
0

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter
is: **25.7mm**

- You can either submit the initial estimate or you can make another estimate by selecting the radio button for 2nd estimate and pressing "Calculate diameter" again.

Std length= 10 mm

Your Average answer is
25.7

Submit your answer

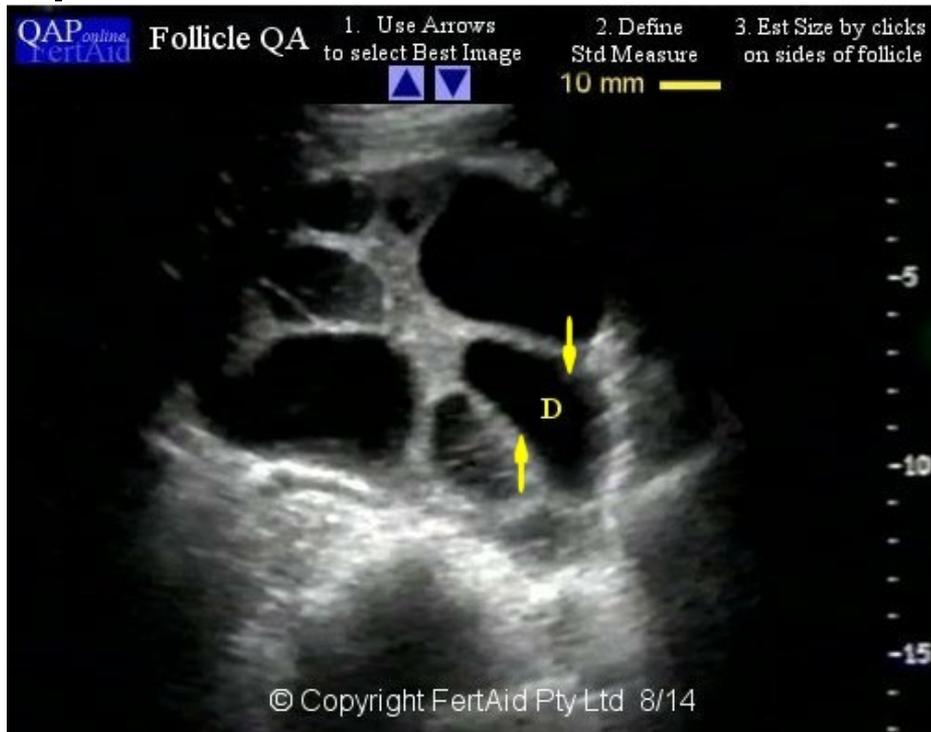
Calculation of size.
Calculate diameter

Std Length 10.0mm
35

1st Estimate 25.7mm
90

2nd Estimate 0.0mm
0

Estimating the follicle diameter....



- Again one click on one side of the follicle and a second click on the opposite side of the follicle.

Estimating the 2nd follicle diameter....

Std length= 10 mm

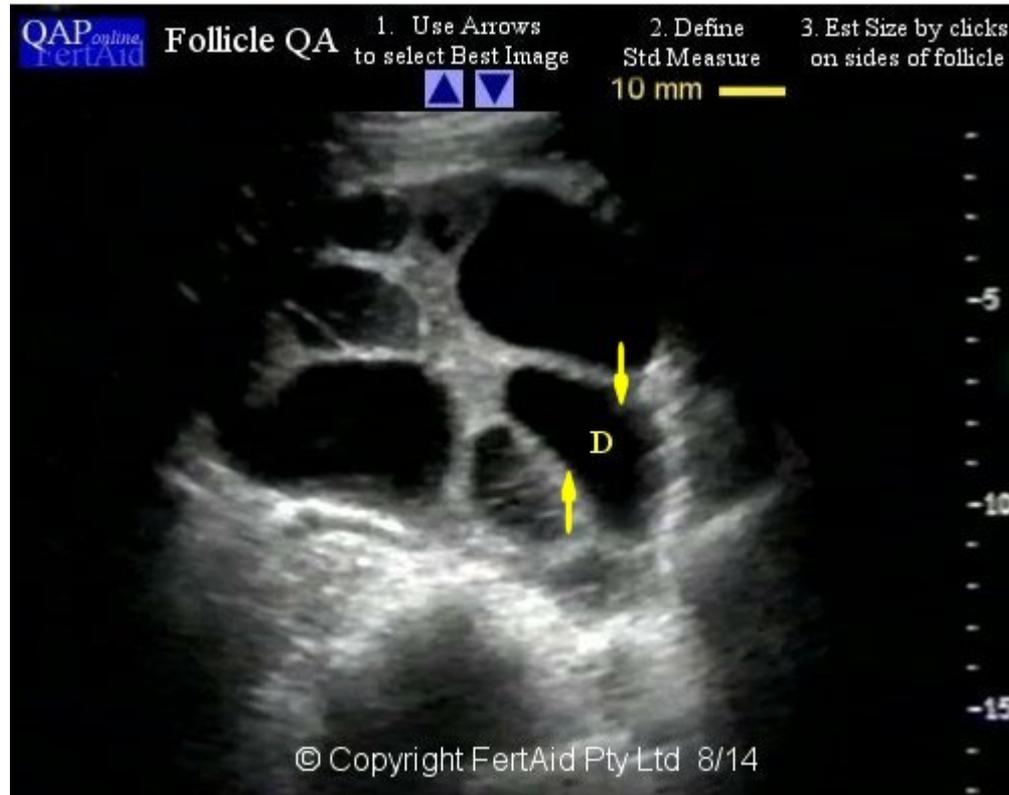
Your Average answer is

Calculation of size.

Std Length 10.0mm

1st Estimate 25.7mm

2nd Estimate 0.0mm



Distance Calculator: From point A to point B

Distance For Second Estimation

Click once on one side of the object to be measured and a second time on the other side and the screen coordinates will appear on this table below. If OK then select "Add this estimate to my answer"

(x_A,

y_A,

(x_B,

y_B,

Distance:

Calc No:

Estimating the 2nd follicle diameter....

Record Measurement

Distance Calculator: From point A to point B

Distance For Second Estimation

Click once on one side of the object to be measured and a second time on the other side of the object and the screen coordinates will appear on this table below. If OK then select "Add this estimate to my answer"

(x_A , 542)

(y_A , 441)

(x_B , 521)

(y_B , 470)

Distance:
35.805027579936315

Calc No:
1

- When you select "Record Measurement"
- The system estimates the second diameter
- Writes this to the second estimate
- Recalculates a new average diameter to submit.

You have selected Image #
13/16

Std length= 10 mm

Your Average answer is
18

Submit your answer

Calculation of size.
Calculate diameter

Std Length 10.0mm
35

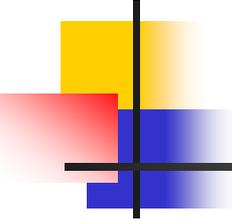
1st Estimate 25.7mm
90

2nd Estimate 10.3mm
36

3rd Estimate 0.0mm
0

4th Estimate 0.0mm
0

The average diameter is: **18.0mm**



Submitting your estimate of follicle diameter....

You have selected Image #
13/16

Std length= 10 mm

Your Average answer is

- When you are happy,
- Select "Submit your answer"
- This is your reply to the question.

Reviewing your estimate of follicle diameter....

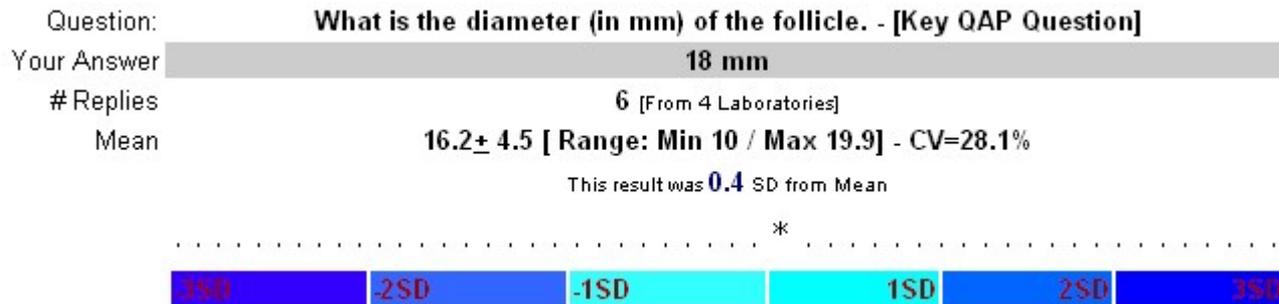


The screenshot shows a software interface with a blue header bar containing the text "Code: USF2006.01 - [Title:Follicle Diameter] Released:1/2006 Page Sp". Below the header is a green bar with the text "QAP Comment: 'Estimate the diameter of the follicle # D -". The main content area is a table with three columns. The first column contains the number "1.". The second column contains the text "QUS001" with a yellow arrow pointing to it. The third column contains a yellow circle with the text "QAP" inside, followed by the text "What is the diameter (in mm) of the follicle. - [Your reply : 18]".

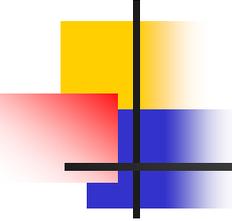
1.	QUS001	 What is the diameter (in mm) of the follicle. - [Your reply : 18]
----	------------------------	---

- When you have answered the question, you can review your answer by selecting the question hyperlink.

Reviewing your estimate of follicle diameter....



- The summary page reveals
 1. Your answer,
 2. The mean, the SD and CV of all answers
 3. The Number of SD units from the mean you answer is.
 4. This is a measure of how close you are to the average reply.



Reviewing your estimate of follicle diameter....

- To understand how this works within QAPonline, you will need to also review the general tutorial.
- If you have any queries, please contact FertAid at office@fertaaid.com