

APPENDIX A

SOLUTIONS AND RECIPES

9.1 Vaginal Smears

9.1.1 Shorr's stain

500ml 100% ethyl alcohol

2.5g Biebrichscarlet (Gurr Microscopy Materials; BDH Ltd., Poole, England)

0.25g Orange G (Saarchem Merck Chemicals, Gauteng, South Africa)

0.375g Fast green FCF (Gurr Microscopy Materials; BDH Ltd., Poole, England)

2.5g Phosphotungstic acid (Merck, Whitehouse Station, NJ, USA)

5ml Glacial acetic acid (Saarchem Merck Chemicals, Gauteng, South Africa)

→ Filtered overnight before use

9.1.2 Method of staining

Smeared cells onto a glass slide.

Cells fixed using hairspray.

Stained in Shorr's stain for 1 minute.

Dehydrated through a graded series of ethanol and mounted in Entellan (Merck, Whitehouse Station, NJ, USA) and coverslipped.

9.2 Treatment Regime

9.2.1 Vehicle

100µl 100% Ethanol

100µl Peanut Oil (Aromatic Essential Oils, Killarney, Gauteng, South Africa)

→ 0.2ml injection (half per rat)

9.2.2 Mifepristone in peanut oil

8mg/kg body weight as recommended by manufacturer

4mg/250g body weight (for human error)

50mg/100ml dissolved in ethanol

→ 0.004g/100µl ethanol

0.004g RU486 (Sigma-Aldrich Co., St Louis, MO, USA)

100µl Ethanol

100µl Peanut Oil (Aromatic Essential Oils, Killarney, Gauteng, South Africa)

→ 0.2ml injection (half per rat)

9.3 Sacrificing of Animals

9.3.1 Rompin-ketamin

0.1ml/100grams body weight as recommended by the manufacturer

The rats weigh approximately 300g thus 0.30ml is needed per animal

0.06ml Rompin (Centaur Labs, Bryanston, Gauteng, South Africa)

0.24ml Anaket (Centaur Labs, Bryanston, Gauteng, South Africa)

9.3.2 1 % Pontamine sky blue

1g Pontamine Sky Blue (BDH Chemical Supplies, Poole, England, UK)

100ml Distilled water

→ Filtered before use

9.3.3 1% Saline

10g Sodium Chloride (NaCl) (ACE, Southdale, Gauteng, South Africa)

100ml Distilled Water

9.4 Scanning Electron Microscopy

9.4.1 Phosphate buffer (pH 7.2)

Phosphate buffer Part A = 15.6g/l 0.1M NaH_2PO_4 (ACE, Southdale, Gauteng, South Africa)

Phosphate buffer Part B = 14.2g/l 0.1M Na_2HPO_4 (ACE, Southdale, Gauteng, South Africa)

140ml Phosphate buffer Part A

360ml Phosphate buffer Part B

To 500ml Distilled water

9.4.2 2.5% Gluteraldehyde

10ml 25% Gluteraldehyde (SPI-Chem, West Chester, PA, USA)

To 100ml Phosphate buffer

9.4.3 1% Osmium tetroxide

2ml 2% Osmium tetroxide (SPI-Chem, West Chester, PA, USA)

5ml Phosphate buffer

9.5 Transmission Electron Microscopy

9.5.1 2.5% Gluteraldehyde

10ml 25% Gluteraldehyde (SPI-Chem, West Chester, PA, USA)

To 100ml Phosphate buffer

9.5.2 1% Osmium tetroxide

2ml 2% Osmium tetroxide (SPI-Chem, West Chester, PA, USA)

5ml Phosphate buffer

9.5.3 Spurr's resin

2.5g ERL – 4221 resin (Advanced Laboratory Solutions, Randburg, Gauteng, South Africa)

1.5g Dow Epoxy Resin (DER) 736 (Advanced Laboratory Solutions, Randburg, Gauteng, South Africa)

6.5g Nonenylsuccinic anhydride (NSA) (Advanced Laboratory Solutions, Randburg, Gauteng, South Africa)

0.1g S/1 (Advanced Laboratory Solutions, Randburg, Gauteng, South Africa)

9.5.4 Toluidine blue & pyronin Y solution

1g Sodium (Na) Borate (Saarchem Merck Chemicals, Gauteng, South Africa)

100ml Distilled water

Solution A: 1g Pyronin Y (SPI-Chem, West Chester, PA, USA)

100ml Distilled water

Solution B: 1g Toluidine blue (SPI-Chem, West Chester, PA, USA)

100ml 1% Na Borate

Mix 1 part Solution A + 4 parts Solution B

→ Filtered before use

9.5.5 5% Aqueous uranyl acetate

5g Uranyl Acetate (Electron Microscopy Sciences, Hatfield, PA, USA)

100ml Double-distilled water

Drop 100% ethanol (to preserve solution)

Stored in light-tight tube at 4°C

9.5.6 Reynold's modified lead citrate

0.66g Lead Nitrate (Electron Microscopy Sciences, Hatfield, PA, USA)

0.88g Sodium Citrate (ACE, Southdale, Gauteng, South Africa)

15ml Boiled distilled water

Stored at 4°C

9.6 Real-Time RT-qPCR

9.6.1 β -mercaptoethanol in RLT buffer

10 μ l β -mercaptoethanol (β ME) (Sigma-Aldrich Co., St. Louis, USA)

1ml Buffer RLT (Qiagen, Germantown, Maryland, USA)

9.6.2 RPE buffer in ethanol

4ml 100% Ethanol

1ml RPE Buffer (Qiagen, Germantown, Maryland, USA)

9.6.3 0.1% Diethyl pyrocarbonate (DEPC) water

1ml DEPC (Cambrex, East Rutherford, NJ, USA)

1000ml dH₂O

9.6.4 10X Tris (0.89M)-boric acid (0.02M) EDTA (0.89M) (TBE) buffer

107.78g Tris base (Sigma-Aldrich Co., St. Louis, MO, USA)

7.44g EDTA (UnivAR Saarchem, Krugersdorp, South Africa)

55g Boric Acid (Saarchem Merck Chemicals, Gauteng, South Africa)

1000ml DEPC water

9.6.5 1X TBE buffer

50ml 10X TBE Buffer

450ml DEPC water

9.6.6 1% Agarose gel in 1XTBE buffer

1g Agarose (Whitehead Scientific, Brackenfell, South Africa)

100ml 1X TBE buffer

Boiled in microwave until agarose dissolved.

Cooled to the touch under cold running water and then poured into a casting unit and allowed to set.

9.6.7 1.5% Agarose gel in 1XTBE buffer

1.5g Agarose (Whitehead Scientific, Brackenfell, South Africa)

100ml 1X TBE buffer

Boiled in microwave until agarose dissolved.

Cooled to the touch under cold running water and then poured into a casting unit and allowed to set.

9.7 Immunofluorescence

9.7.1 10% Buffered formalin

100ml Formalin

4g NaH_2PO_4 (ACE, Southdale, Gauteng, South Africa)

6.5g Na_2HPO_4 (ACE, Southdale, Gauteng, South Africa)

900ml Distilled water

9.7.2 2% 3-Aminopropyl-triethoxysilane in acetone treated slides

6ml 2% 3-Aminopropyl-triethoxysilane (Sigma-Aldrich Co., St Louis, MO, USA)

292ml Acetone (ACE, Southdale, Gauteng, South Africa)

Soaked glass slides in 10% Super 10 detergent (Golden Neo-Life Diamite International, Spartan, South Africa) overnight.

Rinsed in cold water until water is clear of soap.

Rinsed in hot running water for a minimum of 2 hours and left to dry in oven at 60°C overnight.

Incubate in 2% 3-Aminopropyl-triethoxysilane in acetone for 30 minutes

Dipped slide in two changes of 100% acetone and then in dH_2O .

Incubated in 42°C oven overnight.

9.7.3 Phosphate buffered saline (PBS) pH 7.6

8.5g NaCl (ACE, Southdale, Gauteng, South Africa)

1.07g Na_2HPO_4 (ACE, Southdale, Gauteng, South Africa)

0.39g $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$ (Saarchem Merck Chemicals, Gauteng, South Africa)

To 1000ml Distilled water

pH to 7.6 with 1N NaOH (ACE, Southdale, Gauteng, South Africa)

9.7.4 0.1% PBS/Bovine serum albumin (BSA)

2g Bovine serum albumin (BSA) (Sigma-Aldrich Co., St. Louis, MO, USA)

2000ml Phosphate buffered saline

→ stirred on magnetic stirrer until dissolved

9.7.5 0.1% Triton-X100 in 0.1%BSA/PBS

50 μl Triton X-100 (Sigma-Aldrich Co., St. Louis, MO, USA)

50ml 0.1%BSA/PBS

9.7.6 Tris-ethylenediamine tetraacetic acid (EDTA) buffer (pH 9.0)

1.21g Tris base (Sigma-Aldrich Co., St. Louis, MO, USA)
0.37g EDTA (UnivAR Saarchem, Krugersdorp, South Africa)
1000ml Distilled water

Mixed on a magnetic stirrer to dissolve

0.5ml Tween 20 (Merck Chemicals, Wadeville, Gauteng, RSA)

Mixed well on a magnetic stirrer

9.7.7 Polyclonal goat anti-LIF in 0.1%BSA/PBS (1:75)

1µl Goat anti-LIF (Santa Cruz Biotechnology, Santa Cruz, CA, USA)
74µl 0.1%BSA/PBS

9.7.8 Polyclonal goat anti-Muc-1 in 0.1%BSA/PBS (1:100)

1µl Goat anti-Muc-1 (Santa Cruz Biotechnology, Santa Cruz, CA, USA)
99µl 0.1%BSA/PBS

9.7.9 Polyclonal rabbit anti-Calcitonin in 0.1%BSA/PBS (1:100)

1µl Rabbit anti-Calcitonin (Santa Cruz Biotechnology, Santa Cruz, CA, USA)
99µl 0.1%BSA/PBS

9.7.10 Donkey anti-goat IgG conjugated to alexa flour 488 in 0.1%BSA/PBS (1:100)

1µl Donkey anti-goat IgG conjugated to Alexa Flour 488 (Molecular Probes; Invitrogen, Carlsbad, CA, USA)
99µl 0.1%BSA/PBS

9.7.11 Donkey anti-goat IgG conjugated to alexa flour 488 in 0.1%BSA/PBS (1:150)

1µl Donkey anti-goat IgG conjugated to Alexa Flour 488
149µl 0.1%BSA/PBS

9.7.12 Goat anti-rabbit IgG conjugated to alexa flour 594 in 0.1%BSA/PBS (1:150)

1µl Goat anti-rabbit IgG conjugated to Alexa Flour 594 (Molecular Probes; Invitrogen, Carlsbad, CA, USA)
149µl 0.1%BSA/PBS

9.7.13 Dapi in 0.1%BSA/PBS (1:500)

1µl 4',6-diamidino-2-phenylindole (DAPI) (Cambrex, East Rutherford, NJ, USA)

495µl 0.1%BSA/PBS

9.7.14 Sodium citrate buffer (10mM sodium citrate, 0.05% Tween 20, pH 6.0)

2.94g Tri-sodium citrate (dihydrate) (BDH Laboratory Chemicals, Poole, England)

1000ml Distilled water

Mixed on magnetic stirrer to dissolve.

pH adjusted to 6.0 with 1N HCl (ACE, Southdale, Gauteng, RSA)

0.5 ml Tween 20 (Merck Chemicals, Wadeville, Gauteng, RSA)

Mixed well on magnetic stirrer

9.7.15 Polyclonal goat anti-VEGF in 0.1%BSA/PBS (1:50)

1µl Goat anti-VEGF (Santa Cruz Biotechnology, Santa Cruz, CA, USA)

49µl 0.1%BSA/PBS

9.7.16 Polyclonal rabbit anti-bFGF in 0.1%BSA/PBS (1:50)

1µl Rabbit anti-bFGF (Santa Cruz Biotechnology, Santa Cruz, CA, USA)

49µl 0.1%BSA/PBS

9.7.17 Polyclonal rabbit anti-PDGF in 0.1%BSA/PBS (1:75)

1µl Rabbit anti-PDGF (Santa Cruz Biotechnology, Santa Cruz, CA, USA)

74µl 0.1%BSA/PBS

9.7.18 Donkey anti-goat IgG conjugated to alexa flour 488 in 0.1%BSA/PBS (1:200)

1µl Donkey anti-goat IgG conjugated to Alexa Flour 488 (Molecular Probes; Invitrogen, Carlsbad, CA, USA)

199µl 0.1%BSA/PBS

9.7.19 Donkey anti-rabbit IgG conjugated to alexa flour 594 in 0.1%BSA/PBS (1:200)

1µl Donkey anti-rabbit IgG conjugated to Alexa Flour 594 (Molecular Probes; Invitrogen, Carlsbad, CA, USA)

199µl 0.1%BSA/PBS

9.7.20 Polyclonal rabbit anti-Bax in 0.1%BSA/PBS (1:50)

1µl Rabbit anti-VEGF (Santa Cruz Biotechnology, Santa Cruz, CA, USA)

49µl 0.1%BSA/PBS

9.7.21 Monoclonal mouse anti-Bcl-2 in 0.1%BSA/PBS (1:75)

1µl Mouse anti-Bcl-2 (Santa Cruz Biotechnology, Santa Cruz, CA, USA)

9.7.22 Polyclonal rabbit anti-PR in 0.1%BSA/PBS (1:50)

1µl Rabbit anti-PR (DAKO, Carpinteria, CA, USA)

49µl 0.1%BSA/PBS

9.7.23 Donkey anti-goat IgG conjugated to alexa flour 488 in 0.1%BSA/PBS (1:200)

1µl Donkey anti-goat IgG conjugated to Alexa Flour 488 (Molecular Probes, USA)

199µl 0.1%BSA/PBS

9.7.24 Donkey anti-rabbit IgG conjugated to alexa flour 594 in 0.1%BSA/PBS (1:200)

1µl Donkey anti-rabbit IgG conjugated to Alexa Flour 594 (Molecular Probes; Invitrogen, Carlsbad, CA, USA)

199µl 0.1%BSA/PBS

9.7.25 Donkey anti-mouse IgG conjugated to alexa flour 594 in 0.1%BSA/PBS (1:200)

1µl Donkey anti-mouse IgG conjugated to Alexa Flour 594 (Molecular Probes; Invitrogen, Carlsbad, CA, USA)

199µl 0.1%BSA/PBS

APPENDIX B

mRNA SEQUENCES DEMONSTRATING THE PRIMER BINDING SITES FOR EACH PRIMER PAIR

9.8 PR mRNA Sequence (3064bps)

```
1  ATGACTGAGCTGCAGGCAAAGGATCCGCGGACTCTCCACACATCTGGCGCCGCGCCCTCC
61  CCCACCCACGTCGGGTCTCCCTTGCTTGCACGCTTGGACCCGGATCCCTTCCAGGGAAGT
                                                                 F primer
121 CAGCACTCGGACGCATCGTCTGTAGTCTCGCCTATACCGATCTCCCTGGACCGGC TGCTC
181 TTCTCTCGTCTCTGCCAGGCTCAGGAGCTCCAGACGAAAAGACACAAAATCAGCAGTCG
                                                                 R primer
241 CTGTCCGACGTGGAGGGAGCTTTCTCTGGAGTCTGAAGCCGCTCGCGCCGAAGGAAGCAGA
301 AATCCCAGAGCTCCGGAGAAGGACAGCAGACTCTTAGACAGTGTCTTAGACACCCCTGTTG
361 GCGCCCTCGGGGCCCCGAGCAAAGCCAAACCAGCCCTCCAGCCTGCGAGGCCATCACTTCT
421 TGGTGTCTCTTTGGGCCAGAGCTTCCAGAAGACCCCGCAGTGTCCCGCTACCAAGGGG
481 TTGTTGTCCCCGCTCATGAGCCGGCCAGAGACGAAGGCTGGCGACAGCTCCGGGACAGGA
541 GCAGGGCAGAAGGTGCTGCCCAAAGGGCTGTACCACCCCGGCAGCTGTTGCTCCCGACC
601 TCGGGGAGTGTCTCACTGGCCCCGGGGCAGGGGTGAAGCCATCTCAGCAGCCTGCTACGGTG
661 GAGGTGGAGGAGGACGGTGGTCTCGAGACCGAGGGCTCTGCGGGTCCGCTTCTGAAGAGC
721 AAACCTCGAGCACTGGAAGGCATGTGCAGCGGAGGAGGAGTCACAGCCAACGCGCCCGCG
781 GCGGCCCCCAGGAGGCGTCACCTTGGTCCCCAAGGAAGATTCCCGGTTTTCTGCTCCACAG
841 GTCTCCTTGGAGCAAGACGCTCCAGTTGCCCGCGGGCGCTCCCCACTGGCCACCACAGTG
901 GTGGATTTCATTCACGTGCCCATTTCTGCCTCTGAACCACGCTCTCCTAGCCGCCCGCACC
961 CCGCAGCTGCTGGAGGGGGACAGCTACGACGCGGGGCTGCAGCGCAGGTCCCTTTTGCT
1021 CCACCTCGGGGCTCGCCCTCCGCGCCCTCCCCGCGGCTGCCCTGCGGTGACTTCCCAGAC
1081 TGCACTTACCCTCCAGAAGGCGACCCCTAAAGAGGACGGGTTCCTAGTTTACGGCGAATTC
1141 CAGCCTCCCGGCTTGAAGATCAAGGAGGAGGAGGAGGACGAGGCTGCTTCCCGCTCG
1201 CCGCGCCCTACCTGTTGGCCGGAGCCAGCGCCGCCACCTTCCCAGACTTCCCGCTGCCG
1261 CCGGCGCCGCCCGCAGCGCCACCCCTCCAGGCCCCGAGAGGCGGCGGTAGCCGCGGCCCCG
1321 GGCAGCGCCCGGTGTGCGCCAGTGTCTCGTGGGCTCCGCACTGGAGTGCATCCTGTAC
1381 AAAGCGGAGGGCGCGCCGCCACGACGGGTTCGTTGCCCCATTGCCCTGTAAACCCCG
1441 GCCGCCAGCTCCTGCCTGCTTCCCGGGACAGCCTGCCCGCCGCTCCGACCTCCTCCGCA
1501 GCACCGGCCATCTACCCGCCGCTCGGCCTCAATGGGCTCCCTCAGCTGGGTACCAGGCC
1561 GCGGTGCTCAAGGACAGCCTGCCCAAGTCTACCCGCCCTACCTCACTACCTGAGGCCA
1621 GATTCAAGAAGCCAGCCAGAGCCCAATATGGCTTTGATTTCCTTACCTCAGAAGATCTGT
1681 TTAATCTGCGGGGATGAAGCATCTGGCTGTCACTATGGTGTGCTTACCTGTGGGAGCTGC
1741 AAGGTCTTCTTTAAGAGGGCGATGGAAGGGCAGCATAACTATTTATGTGCCGGAAGAAAT
1801 GATTGCAATTGTTGATAAAATCCGCAGAAAAAACTGTCCAGCATGTGCTGTGAAAGTGC
1861 TGTCAGGCTGGCATGGTCTTGGAGGTGCTAAGTTTAAGAAGTTCAATAAAGTCCGAGTT
1921 ATGAGAGCCCTCGATGGTGTGCTCTCCCCAGTCAGTGGGCTTCCTAATGAGAGCCAG
1981 ACCCTGGGCCAGAGAATCACATTTTACCAAATCAAGAGATTCAACTGGTTCCGCCACTC
2041 ATCAACCTGCTCATGAGCATTGAACCTGATGTGGTTTATGCAGGGCATGACAACACAAAG
2101 CCCGACACTTCCAGCTCTTTGCTGACCAGTCTCAACCACTAGGCGAGAGGCAGCTGCTT
2161 TCAGTAGTCAAATGGTCTAAGTCTCTGCCAGGTTTCCGGAACCTACACATCGATGACCAG
2221 ATAACCCTGATTCACTACTCCTGGATGAGCCTGATGGTGTGTTGGCTGGGGTGGAGGTGCG
2281 TACAAGCATGTGAGTGACAGATGCTATATTTGCACCTGATCTAATCCTGAATGAGCAG
2341 AGGATGAAGGAGTTGTCATTCTACTCGCTGTGCCTTACCATGTGGCAAATCCCACAGGAG
2401 TTTGTCAAGCTCCAGGTGACCCACGAGGAGTTCCTCTGTATGAAAGTCTTACTTCTTCTT
2461 AACACAATTTCCTTTGGAAGGCCTGAGGAGTCAAAGCCAGTTTGAAGAGATGAGGTCAAGC
2521 TATATTCGGGAATTGATCAAGGCAATTGGCTTAAGACAGAAAGGGTGGTCCCCAGTTCA
2581 CAACGCTTCTATCAACTTACAAAATCTCTTGACAGCTTGCATGATCTGTGAAACAGCTC
2641 CACCTGTACTGCTGAATACGTTTATCCAATCCCGGGCACTGGCTGTGGAATTTCCGGAA
2701 ATGATGTCTGAAGTTATTGCTGCCAGTTGCCCAAGATCCTGGCGGGCATGGTGAAGCCT
2761 CTCTCTTTTACAAAAGTGATGACTTTTCTTTGTTCTCTGCAAAAATTGAATTTGT
2821 GGTGTGTCATTTTGTCTCAGTCAGGACAGTCAGCTCTGTGTCTTTATAATGTCCTTCTGA
2881 AAGCCTTACGTGTATACATATCAGCTGTAACTTAGGAGAAAACCAATGAAATTTGGAT
2941 TTTCTTTGTGATGTCTAAGCAGAAATTTTAAAGTGTGTTGTGACCCATATTTTGAGAG
3001 TTTACATGGTTAAAAAGGACTAAAGTTGATTGTATAAGTAACTATATCTCACCCGTGTT
3061 ATTT
```

Figure 9.1 PR mRNA sequence demonstrating the primer binding sites

9.9 B-actin mRNA Sequence (1275bps)

```
1  GTCGAGTCCGCGTCCACCCGCGAGTACAACCTTCTTGAGCTCCTCCGTCGCCGGTCCAC
61  ACCCGCCACCAGTTCGCCATGGATGACGATATCGCTGCGCTCGTCGCGACAACGGCTCC
121 GGCATGTGCAAGGCCGGCTTCGCGGGCGACGATGCTCCCCGGGCGGTCTTCCCCTCCATC
181 GTGGGCCGCCCTAGGCACCAGGTGTGATGGTGGGTATGGGTGAGAAGGACTCCTACGTG
241 GGCGACGAGGCCAGAGCAAGAGAGGCATCCTGACCCTGAAGTACCCCATTTGAACACGGC
301 ATTGTCACCAACTGGGACGATATGGAGAAGATTTGGCACCACACTTTCTACAATGAGCTG
                                     F primer
361 CGTGTGGCCCCCTGAGGAGCACCTGTGCTGCTCACCAGGCCCCCTCTGAACCTTAAGGCC
421 AACCGTGAAAAATGATGACCCAGATCATGTTTGGAGACCTTCAACACCCAGCCATGTACGTA
                                     R primer
481 GCCATCCAGGCTGTGTTGTCCCTGTATGCCCTCTGGTCGTACCACTGGCATTGTGATGGAC
541 TCCGGAGACGGGGTCACCCACACTGTGCCCATCTATGAGGGTTACGCGCTCCCTCATGCC
601 ATCCTGCGTCTGGACCTGGCTGGCCGGGACCTGACAGACTACCTCATGAAGATCCTGACC
661 GAGCGTGGCTACAGCTTCACCACCACAGCTGAGAGGGAATCGTGCGTGACATTAAAGAG
721 AAGCTGTGCTATGTTGCCCTAGACTTCGAGCAAGAGATGGCCACTGCCGCATCCTCTTCC
781 TCCCTGGAGAAGAGCTATGAGCTGCCTGACGGTCAGGTCATCACTATCGGCAATGAGCGG
841 TTCCGATGCCCCGAGGCTCTCTTCCAGCCTTCTTCCCTGGGTATGGAATCCTGTGGCATC
901 CATGAAACTACATTCAATTCATCATGAAGTGTGACGTTGACATCCGTAAAGACCTCTAT
961 GCCAACACAGTGTCTGTGTTGGTGGCACCACCATGTACCCAGGCATTGCTGACAGGATGCAG
1021 AAGGAGATTACTGCGCTGGCTCCTAGCACCATGAAGATCAAGATCATGTCTCCTCTGAG
1081 CGCAAGTACTCTGTGTGGATTGGTGGCTCTATCCTGGCCTCACTGTCCACCTTCCAGCAG
1141 ATGTGGATCAGCAAGCAGGAGTACGATGAGTCCGGCCCCCTCCATCGTGACCCGAAATGC
1201 TTCTAGGCGGACTGTTACTGAGCTGCGTTTTACACCCCTTTCTTTGACAAAACCTAATTG
1261 CGCAGAAAAA
```

Figure 9.2 β -actin mRNA sequence demonstrating the primer binding sites

9.10 VEGF mRNA Sequence (703bps)

```
1  AACCATGAACTTTCTGCTCTCTTGGGTGCACTGGACCCTGGCTTTACTGCTGTACCTCCA
61  CCATGCCAAGTGGTCCCAGGCTGCACCCACGACAGAAGGGGAGCAGAAAGCCCATGAAGT
121 GGTGAAGTTCATGGACGTCTACCAGCGCAGCTATTGCCGTCCAATTGAGACCTTGGTGGG
181 CATCTTCCAGGAGTACCCCGATGAGATAGAGTATATCTTCAAGCCGTCCTGTGTGCCCT
241 AATGCGGTGTGCGGGCTGCTGCAATGATGAAGCCCTGGAGTGCCTGCCACGTCGGAGAG
301 CAACGTCACTATGCAGATCATGCGGATCAAACCTCACCAAGCCAGCACATAGGAGAGAT
361 GAGCTTCCTGCAGCATAGCAGATGTGAATGCAGACCAAGAAAGATAGAACAAGCCAGA
                                     F primer
421 AAAAAAATCAGTTCGAGGAAAGGGAAAGGGTCAAAAAAGAAAGCGCAAGAAATCCCAGTT
481 TAAATCCTGGAGCGTTCACTGTGAGCCTTGTTCAGAGCGGAGAAAGCATTTGTTGTCCA
                                     R primer
541 AGATCCGCGAGACGTGTAAATGTTTCTGCAAAAAACAGACTCGCGTTGCAAGGCGAGGCA
601 GCTTGAGTTAAACGAACGTACTTGACAGATGTGACAAGCCAAGGCGGTGAGCCAGGCTGCA
661 GGAAGGAGCCTCCCTCAGGGTTTCGGGAAGTAGACCTCTCACC
```

Figure 9.3 VEGF mRNA sequence demonstrating the primer binding sites

9.11 bFGF mRNA Sequence (1269bps)

```

1 GGCACCCCATTCCTGGCCTCTGTCTCCCG F primer CACCCTATCCCTTCACAGCCT GTGCTCTAGG
61 GGA CTGGAGATTTCCAAAACCTGACCCGATCCCTCCCCAGTTCAGTTCCCTT R primer TACTGCTT
121 TGGGTGCAAGCC TGGTCGTTGTGTTAAAAGGCAGGAAGGGAGAAAGTTGCATTTAAACTT
181 TAGGAGCTGCGTCACGGCAGTCTCCTGGAGAAAAGCTCCGCCGAACGGGACAGATTCTTTT
241 TGCAACTTGGAGGCGCCGGCGTGGGGAGGAGCGGCGCGTGGGGCGGGGCGCGCGGG
301 CCGGGGTGCAGGCGGGGACGCGGGGTGACGCGGGCCCGGGCCGCTGTAGCACACAGGGGC
361 TCGGTCTCTCGGCTTCAGGCGGAGTCCGGCTGCACTAGGCTGGGAGCGCGGCGGGACGCG
421 AACCGGGAGGCTGGCAGCCCGCGGGCGAGCCGCGCTGGGGGGCCGAGGCCGGGGTCGGGG
481 CCGGGGAGCCCCGAGAGCTGCCGAGCGGGGTCCCGGGGCCCGGAGGGGCCATGGCTGC
541 CGGCAGCATCACTTCGCTTCCCGCACTGCCGGAGGACGGCGGCGGCGCCTTCCCAACCGG
601 CCACTTCAAGGATCCCAAGCGGCTCTACTGCAAGAACGGCGGCTTCTTCTGCGCATCCA
661 TCCAGACGGGCGCGTGGACGCGTCCGGGAGAAGAGCGACCCACACGTCAAACACAGCT
721 CCAAGCAGAAGAGAGAGGAGTTGTGTCCATCAAGGGAGTGTGTGCGAACCGGTACCTGGC
781 TATGAAGGAAGATGGACGGCTGCTGGCTTCTAAGTGTGTACAGAAGAGTGTCTTCTTCT
841 TGAACGCCTGGAGTCCAATAACTACAACACTTACCGGTACCGGAAATACTCCAGTTGGTA
901 TGTGGCACTGAAACGAACTGGGCAGTATAAACTCGGATCCAAAACGGGGCCCTGGACAGAA
961 GGCCATACTGTTTCTTCCAATGTCTGCTAAGAGCTGACTCTCTTTAGACACTGTCACTCT
1021 CAGGCAGTCCCCGTGGTAGAGCTTGTAGAACAGGCTGTGTATACTGCAGGGAGTTCTCT
1081 CCATGCTGAGGTCAATCTTGTCAAACCCCTCCCTGTGTCCGTATAGTAGTAGCCTAGCCA
1141 CCCTGCTGGTGATGGGGGTTGTGTGTTTAGTCCTGGCCAGGCTTTCTAGATCCATCCATT
1201 CACACTTCAAGCATTCCTGCTGGCAGAAGTTGATGGTGAAGGAACGCGCTGCAGGCGGC
1261 AGATCAGGT

```

Figure 9.4 bFGF mRNA sequence demonstrating the primer binding sites

9.12 PDGF mRNA Sequence (543bps)

```

1 CGACAGGGGGATCCCATTCCCTGAGGAACCTCTATGAAATGCTGAGTGACCACTCCATCCGC
61 TCCTTTGATGACCTTCAGCGCCTGCTGCACAGAGACTCCGTAGACGAAGATGGGGCTGAG
121 CTGGA CTTGAACATGACCCGAGCACATTCT F primer ECAGTCGAGTCCGAAAGCTCAT CTCGAGGG
181 AGGAGGAGCCTAGGGTCTCTGGCTGCAGCAGAGCCTGCCGTAATCGCCGAGT R primer CCAAGACG
241 CGTACAGAGCTGTT CCAGATCTCGCGGAACCTCATCGATCGCACCAATGCCAACTTCCTG
301 GTGTGGCCGCCCTGCGTGGAGGTGCAGCGCTGCTCGGGCTGCTGCAATAACCGCAATGTG
361 CAGTGCCGGCTCGCAGGTGCAGATGCGGCCGCTGCAGCTTTAAAGATCGAAATGTGAGA
421 AAGAAGCCAGTCTTCAAGAAGGCCACAGTGACCCTGGAGGACCATCTGGCCTGCAAGTGT
481 GAGACAGTAGTGACCCCTCGGCCGCTGACTCGAAGTCCTGGGACATCCAGGGAGCATCGA
541 GGT

```

Figure 9.5 PDGF mRNA sequence demonstrating the primer binding sites

9.13 Bax mRNA Sequence (742bps)

```

1 ATGGACGGGTCCGGGGATCATCTCGGAGGCGGCGGGCCACCAGCTCTGAACAGATCATG
61 AAGACAGGGGCCTTTTGTCTACAGGGTTTCATCCAGGATCGAGCAGAGAGGATGGCTGGG
121 GAGACACCTGAGCTGACCTTGGAGCAGCCGCCCCAGGACGCATCCACCAAGAAGCTGAGC
181 F primer GAGTGCTCTCAGGCGAATTGGC GATGA ACTGGACAACAACATGGAGCTGCAGAGGATGATT
241 GCTGATGTGGATACAGACTCCCC R primer CCGAGAGGTCTTCTTCCGTG TGGCAGCTGACATGTTT
301 GCAGACGGCAACTTCAACTGGGGCCGGGTGGTTGCCCTTTTCTACTTTGCTAGCAAACTG
361 GTGCTCAAGGCCCTGTGCACTAAAGTGCCCGAGCTGATCAGAACCATCATGGGCTGGACA
421 CTGGACTTCCTCCGGGAGCGGCTGCTTGTCTGGATCCAAGACCAGGGTGGCTGGGATGGC
481 CTCCTTTCTACTTCCGGGACCCCAACATGGCAGACAGTGACCATCTTTGTGGCTGGAGTC
541 CTCAGTCGCTCACTACCATCTGGAAGAAGATGGGCTGAGGCTTCTGCTGCCTTGGACT
601 GTGTCTTTTCTTCATAAATTATGACATTTTCTGGGATGAATGGGGAACGGGGAAAGGC
661 ATTTTCTTACTTTTGTAAATTATTGGGAGGGGTGGGAATGGTGGCCTGGGGGAGGTGCCA
721 ATAAACCTCAGGTCCACTTTGG

```

Figure 9.6 Bax mRNA sequence demonstrating the primer binding sites

9.14 Bcl-2 mRNA Sequence (1179bps)

```
1  CCTCATGAAATAAAAAGCTGAAAGGAATTTGAATAAAAATTTTCTGCATCTCATGCCAAG
61  GGGGAAACACCAGAATCAAGTGTTTCGTCATAACTAAAGACACCCCTTCATCCAAGAATGC
121 AAAGCACATCCAATAAAAAGCGCTGGATTATAACTTCTTTTTTCTCTCTTTTCGGGCCGTGG
181 GGC GGGAGCCGGGACGCGAAGTGCTATTGGTACCTGCAGCTTCTTTCCCCGGAAGGATGG
241 CGCAAGCCGGGAGAACAGGGTATGATAACCGGGAGATCGTGATGAAGTACATCCATTATA
301 AGCTGTCACAGAGGGGCTACGAGTGGGATACTGGAGATGAAGACTCCGCGCCCTGAGGG
361 CTGCCCCCACCCTGGCATCTTCTCCTTCCAGCCTGAGAGCAACCGGACGCCCGCTGTGC
421 ACCGAGACACGGCTGCCAGGACGTGCGCTCTACGGCCCCCTTGTCGCCACCGCTGGGCCTG
481 CGCTCAGCCCTGTGCCACCTGTGGTCCACCTGACCCTCCGCCGGGCTGGGGATGACTTCT
541 CTCGTCGCTACCGTCGCGACTTTGCAGAGATGTCCAGTCAGCTGCACCTGACGCCCTTCA
601 CCGCGAGGGGACGCTTTGCCACGGTGGTGGAGGAACTCTTCAGGGATGGGGTGAAGTGGG
661 GGAGGATTGTGGCCTTCTTTGAGTTCGGTGGGGTCATGTGTGTGGAGAGCGTCAACAGGG

                                F primer
721 AGATGTCAACCCTGGTGGACAACATCGCTCTGTGGATGACTGAGTACCTGAACCGGCATC
781 TGCACACCTGGATCCAGGATAACGGAGGCTGGGATGCCTTTGTGGAATATATGGCCCCA

                                R primer
841 GCATGCGACCTCTGTTTGATTCTCTCTGGCTGTCTCTGAAGACGCTGCTCAGCCTGGCCC
901 TGGTGGGGGCTGCATCACTCTGGGTGCATACCTGGGCCACAAGTGAGGTCAGCAGACCT
961 GCCCCAAACAAATATGCAAAAGGTTCACTAAAGCAGTAGAAATTATATGCATTATCAAGG
1021 ATGGACCATGAAACAAAGTTGTGATTTTTTTTTTAAAGCAGAACACACACACACACACA
1081 CACACACACACACACACACACACACACACATTCAGGCAAATGGTCAAATCAGCTATTT
1141 ACTGCCAAAGGGAAATATCATTTATTTTTTACATTATTT
```

Figure 9.7 Bcl-2 mRNA sequence demonstrating the primer binding sites

APPENDIX C

STATISTICAL ANALYSIS FOR IMMUNOFLUORESCENCE

9.15 Statistical Analysis of Protein Expression of the Progesterone Receptor (PR)

9.15.1 Statistical analysis of PR protein expression

9.15.1.1 Summaries of Statistics Tests for Significant Differences in the Mean PR Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.1 Mean and standard error of the mean values of PR protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	191.265	2.1176	155.371	1.9157	177.481	1.9077	101.595	2.1852
4.5 NIS	Saline	6	106.87	1.6863	85.41	1.6256	114.777	1.8472	50.618	2.0753
4.5 IS	RU486	6	107.482	2.1426	58.638	2.2938	126.525	2.2115	55.52	2.3905
4.5 NIS	RU486	6	81.375	2.1569	38.608	1.9923	84.623	1.9392	47.35	2.4087
5.5 IS	Saline	6	181.452	1.8522	123.465	1.7866	213.401	1.7904	115.217	2.0263
5.5 NIS	Saline	6	170.548	1.986	105.363	1.9829	180.455	2.2299	114.053	1.9129
5.5 IS	RU486	6	131.325	2.3361	73.812	1.954	124.69	2.309	78.857	2.1112
5.5 NIS	RU486	6	159.485	1.9584	87.908	2.2907	151.365	1.804	72.218	2.0605
6.5 IS	Saline	7	199.72	2.1723	161.76	1.9535	195.89	1.6036	92.466	1.8725
6.5 NIS	Saline	7	169.419	1.5451	129.804	2.3316	176.476	1.9775	88.2	1.2079
6.5 IS	RU486	6	170.548	1.986	108.99	2.0574	102.78	1.9381	79.737	1.8722
6.5 NIS	RU486	6	154.268	1.8715	70.357	1.7376	104.685	2.0637	62.271	1.7794

IS – implantation sites, NIS – non-implantation sites.

Table 9.2 Tests for homogeneity of the data (equality of variance) for PR protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests (p=0.05)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	0.9073	11	62	0.5388
Brown-Forsythe	0.7173	11	62	0.7176
Levene	0.7638	11	62	0.6738
Bartlett	0.5218	11	?	0.8902
Subepithelial Stroma				
O'Brien[.5]	0.3404	11	62	0.9729
Brown-Forsythe	0.3765	11	62	0.9605
Levene	0.2872	11	62	0.9861
Bartlett	0.1556	11	-	0.9993
Glandular Epithelium				
O'Brien[.5]	0.2105	11	62	0.9963
Brown-Forsythe	0.1738	11	62	0.9984
Levene	0.2266	11	62	0.9949
Bartlett	0.0907	11	-	1
Glandular Stroma				
O'Brien[.5]	0.4349	11	62	0.9343
Brown-Forsythe	0.4109	11	62	0.946
Levene	0.4295	11	62	0.937
Bartlett	0.2332	11	-	0.9953

$p > 0.05$ so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.3 Welch ANOVA test for significant differences between the mean PR protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
288.3548	11	24.277	<.0001
Subepithelial Stroma			
289.0409	11	24.32	<.0001
Glandular Epithelium			
389.0265	11	24.277	<.0001
Glandular Stroma			
99.4017	11	24.18	<.0001

$p < 0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean PR protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different

6.5UT IS vs. 5.5UT IS: significantly different

5.5UT NIS vs. 4.5UT NIS: significantly different

5.5UT NIS vs. 6.5UT NIS: not significantly different

5.5T IS vs. 4.5T IS: significantly different

6.5T IS vs. 5.5T IS: significantly different

5.5T NIS vs. 4.5T NIS: significantly different

5.5T NIS vs. 6.5T NIS: significantly different

4.5UT IS vs. 4.5T IS: significantly different

4.5UT NIS vs. 4.5T NIS: significantly different

5.5UT IS vs. 5.5T IS: significantly different

5.5UT NIS vs. 5.5T NIS: significantly different

6.5UT IS vs. 6.5T IS: significantly different

6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different

6.5UT IS vs. 5.5UT IS: significantly different

5.5UT NIS vs. 4.5UT NIS: significantly different

6.5UT NIS vs. 5.5UT NIS: significantly different

4.5T IS vs. 5.5T IS: significantly different

6.5T IS vs. 5.5T IS: significantly different

5.5T NIS vs. 4.5T NIS: significantly different

5.5T NIS vs. 6.5T NIS: significantly different

4.5UT IS vs. 4.5T IS: significantly different

4.5UT NIS vs. 4.5T NIS: significantly different

5.5UT IS vs. 5.5T IS: significantly different

5.5UT NIS vs. 5.5T NIS: significantly different

6.5UT IS vs. 6.5T IS: significantly different

6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different

5.5UT IS vs. 6.5UT IS: significantly different

5.5UT NIS vs. 4.5UT NIS: significantly different

5.5UT NIS vs. 6.5UT NIS: not significantly different
 4.5T IS vs. 5.5T IS: not significantly different
 5.5T IS vs. 6.5T IS: significantly different
 5.5T NIS vs. 4.5T NIS: significantly different
 5.5T NIS vs. 6.5T NIS: significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: significantly different
 5.5UT IS vs. 5.5T IS: significantly different
 5.5UT NIS vs. 5.5T NIS: significantly different
 6.5UT IS vs. 6.5T IS: significantly different
 6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
 5.5UT IS vs. 6.5UT IS: significantly different
 5.5UT NIS vs. 4.5UT NIS: significantly different
 5.5UT NIS vs. 6.5UT NIS: significantly different
 5.5T IS vs. 4.5T IS: significantly different
 6.5T IS vs. 5.5T IS: not significantly different
 5.5T NIS vs. 4.5T NIS: significantly different
 5.5T NIS vs. 6.5T NIS: significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: not significantly different
 5.5UT IS vs. 5.5T IS: significantly different
 5.5UT NIS vs. 5.5T NIS: significantly different
 6.5UT IS vs. 6.5T IS: significantly different
 6.5UT NIS vs. 6.5T NIS: significantly different

9.16 Statistical Analysis of Protein Expression of the Apoptosis Pathway-Related Factors

9.16.1 Statistical analysis of Bax protein expression

9.16.1.2 Summaries of Statistics Tests for Significant Differences in the Mean Bax Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.4 Mean and standard error of the mean values of Bax protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	116.919	3.22372	78.213	1.3625	182.52	1.6525	64.7563	1.4778
4.5 NIS	Saline	6	91.486	2.89284	44.832	1.3938	96.817	1.5855	43.3018	1.4687
4.5 IS	RU486	6	77.587	3.02918	45.321	1.0042	75.973	1.6464	31.6938	1.2461
4.5 NIS	RU486	6	72.305	3.69819	38.853	1.3667	87.733	1.6703	37.2068	1.3779
5.5 IS	Saline	6	140.833	3.98535	75.794	1.2594	180.705	1.5839	73.0129	1.4042
5.5 NIS	Saline	6	132.435	3.75018	60.185	1.6487	151.228	1.2957	54.2623	1.565
5.5 IS	RU486	6	80.174	3.88188	40.148	1.5148	62.807	1.5307	32.0588	1.3945
5.5 NIS	RU486	6	87.222	3.42485	48.673	1.3905	75.552	1.5569	37.67	1.5687
6.5 IS	Saline	7	167.921	3.8588	138.378	1.125	195.443	1.2922	90.7886	1.4267
6.5 NIS	Saline	7	83.209	4.06162	49.449	1.2025	102.518	1.1654	42.0971	1.1786
6.5 IS	RU486	6	99.402	4.01108	56.723	1.3843	92.733	1.3341	44.0983	1.6323
6.5 NIS	RU486	6	104.375	4.00609	54.082	1.7797	85.303	1.1504	51.725	1.2808

IS – implantation sites, NIS – non-implantation sites.

Table 9.5 Tests for homogeneity of the data (equality of variance) for Bax protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests ($p=0.05$)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	0.2579	11	62	0.9911
Brown-Forsythe	0.3174	11	62	0.9793
Levene	0.3365	11	62	0.9741
Bartlett	0.1231	11	-	0.9998
Subepithelial Stroma				
O'Brien[.5]	0.4943	11	62	0.8998
Brown-Forsythe	0.4364	11	62	0.9335
Levene	0.4421	11	62	0.9305
Bartlett	0.1988	11	-	0.9977
Glandular Epithelium				
O'Brien[.5]	0.256	11	62	0.9914
Brown-Forsythe	0.2054	11	62	0.9967
Levene	0.2347	11	62	0.994
Bartlett	0.1421	11	-	0.9995
Glandular Stroma				
O'Brien[.5]	0.1539	11	62	0.9991
Brown-Forsythe	0.1159	11	62	0.9998
Levene	0.1358	11	62	0.9995
Bartlett	0.0774	11	-	1

$p>0.05$ so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.6 Welch ANOVA test for significant differences between the mean Bax protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
316.8171	11	24.309	<.0001
Subepithelial Stroma			
429.1152	11	24.255	<.0001
Glandular Epithelium			
846.0559	11	24.253	<.0001
Glandular Stroma			
128.5353	11	24.281	<.0001

$p<0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean Bax protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different

6.5UT IS vs. 5.5UT IS: significantly different

5.5UT NIS vs. 4.5UT NIS: significantly different

5.5UT NIS vs. 6.5UT NIS: significantly different

5.5T IS vs. 4.5T IS: not significantly different

6.5T IS vs. 5.5T IS: significantly different

5.5T NIS vs. 4.5T NIS: significantly different

6.5T NIS vs. 5.5T NIS: significantly different

4.5UT IS vs. 4.5T IS: significantly different

4.5UT NIS vs. 4.5T NIS: significantly different

5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: not significantly different
6.5UT IS vs. 5.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
4.5T IS vs. 5.5T IS: not significantly different
6.5T IS vs. 5.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5T NIS vs. 6.5UT NIS: not significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: not significantly different
6.5UT IS vs. 5.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
4.5T IS vs. 5.5T IS: significantly different
6.5T IS vs. 5.5T IS: significantly different
4.5T NIS vs. 5.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: not significantly different
6.5T IS vs. 5.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: not significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

9.16.2 Statistical analysis of Bcl-2 protein expression

9.16.2.1 Summaries of Statistics Tests for Significant Differences in the Mean Bcl-2 Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.7 Mean and standard error of the mean values of Bcl-2 protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	37.5465	1.1981	29.8983	1.821	31.801	1.8238	25.608	1.307
4.5 NIS	Saline	6	36.8017	1.8223	25.61	1.8101	26.3677	1.4805	25.1122	1.4841
4.5 IS	RU486	6	35.53	1.3813	25.3617	2.0912	21.405	1.1771	17.82	1.3985
4.5 NIS	RU486	6	33.3733	1.3231	22.7017	1.163	22.6017	1.6729	19.22	1.3367
5.5 IS	Saline	6	44.17	1.3166	34.7967	1.548	38.1917	1.4163	27.7033	1.2452
5.5 NIS	Saline	6	52.24	1.7648	31.9617	1.3661	39.1067	1.785	27.1383	1.2587
5.5 IS	RU486	6	62.0167	1.5549	48.538	1.3515	42.3067	1.407	26.0933	1.3835
5.5 NIS	RU486	6	62.8537	1.6884	42.7648	1.5137	41.2983	1.4093	28.24	1.4484
6.5 IS	Saline	7	98.6971	1.1608	58.9414	1.1896	39.0914	0.9369	32.3629	1.26
6.5 NIS	Saline	7	36.58	1.3978	27.7329	1.245	26.7814	1.1819	23.644	1.2567
6.5 IS	RU486	6	71.12	1.4306	43.025	1.6189	29.945	1.3622	24.64	1.6467
6.5 NIS	RU486	6	59.9533	1.4221	39.8217	1.2565	33.695	1.7195	33.245	1.8959

IS – implantation sites, NIS – non-implantation sites.

Table 9.8 Tests for homogeneity of the data (equality of variance) for Bcl-2 protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests ($p=0.05$)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	0.369	11	62	0.9633
Brown-Forsythe	0.2238	11	62	0.9951
Levene	0.2231	11	62	0.9952
Bartlett	0.1759	11	-	0.9987
Subepithelial Stroma				
O'Brien[.5]	0.8654	11	62	0.5776
Brown-Forsythe	0.5098	11	62	0.8896
Levene	0.8405	11	62	0.6011
Bartlett	0.3105	11	-	0.984
Glandular Epithelium				
O'Brien[.5]	0.6065	11	62	0.8162
Brown-Forsythe	0.3457	11	62	0.9713
Levene	0.5027	11	62	0.8943
Bartlett	0.2974	11	-	0.9866
Glandular Stroma				
O'Brien[.5]	0.432	11	62	0.9357
Brown-Forsythe	0.3371	11	62	0.9739
Levene	0.3567	11	62	0.9677
Bartlett	0.1463	11	-	0.9995

$p>0.05$ so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.9 Welch ANOVA test for significant differences between the mean Bcl-2 protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
186.0066	11	24.266	<.0001
Subepithelial Stroma			
53.7942	11	24.242	<.0001
Glandular Epithelium			
23.853	11	24.185	<.0001
Glandular Stroma			
7.7988	11	24.277	<.0001

$p < 0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean Bcl-2 protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: not significantly different
6.5UT IS vs. 5.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: significantly different
5.5T NIS vs. 6.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: not significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: not significantly different
6.5UT IS vs. 5.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: not significantly different
5.5UT NIS vs. 6.5UT NIS: not significantly different
5.5T IS vs. 4.5T IS: significantly different
5.5T IS vs. 6.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: significantly different
5.5T NIS vs. 6.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: not significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: not significantly different
6.5UT IS vs. 5.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different

5.5T IS vs. 6.5T IS: significantly different
 5.5T NIS vs. 4.5T NIS: significantly different
 5.5T NIS vs. 6.5T NIS: significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: not significantly different
 5.5T IS vs. 5.5UT IS: not significantly different
 5.5T NIS vs. 5.5UT NIS: not significantly different
 6.5UT IS vs. 6.5T IS: significantly different
 6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: not significantly different
 6.5UT IS vs. 5.5UT IS: not significantly different
 5.5UT NIS vs. 4.5UT NIS: not significantly different
 5.5UT NIS vs. 6.5UT NIS: not significantly different
 5.5T IS vs. 4.5T IS: significantly different
 5.5T IS vs. 6.5T IS: not significantly different
 5.5T NIS vs. 4.5T NIS: significantly different
 6.5T NIS vs. 5.5T NIS: not significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: not significantly different
 5.5UT IS vs. 5.5T IS: not significantly different
 5.5T NIS vs. 5.5UT NIS: not significantly different
 6.5UT IS vs. 6.5T IS: significantly different
 6.5T NIS vs. 6.5UT NIS: significantly different

9.17 Statistical Analysis of Protein Expression of the Angiogenic Pathway-Related Growth Factors

9.17.1 Statistical analysis of VEGF protein expression

9.17.1.1 Summaries of Statistics Tests for Significant Differences in the Mean VEGF Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.10 Mean and standard error of the mean values of VEGF protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	67.338	1.9193	45.635	2.1457	85.541	2.3362	46.5867	2.1496
4.5 NIS	Saline	6	69.307	1.826	49.56	2.2452	84.746	1.7477	60.1202	1.9603
4.5 IS	RU486	6	59.688	2.3744	36.4267	1.6934	48.047	1.6143	65.8550	6.3581
4.5 NIS	RU486	6	48.65	1.7965	34.27	1.8127	61.303	1.683	42.7933	1.7279
5.5 IS	Saline	6	124.883	1.6783	75.5967	1.8014	141.684	1.6551	43.985	1.4855
5.5 NIS	Saline	6	113.565	1.7946	59.045	1.5621	137.593	1.7615	67.8333	1.7515
5.5 IS	RU486	6	68.675	1.2175	42.445	1.6782	48.754	1.768	54.4304	1.6246
5.5 NIS	RU486	6	58.263	1.8879	51.33	1.6849	41.732	1.7516	36.77	1.5668
6.5 IS	Saline	7	130.804	1.6414	78.8357	1.8965	139.31	1.897	43.235	1.7014
6.5 NIS	Saline	7	137.686	1.53	87.2457	1.6491	142.371	1.544	61.2914	1.5239
6.5 IS	RU486	6	81.148	1.9327	48.5117	1.6874	55.456	1.1977	62.8417	1.6522
6.5 NIS	RU486	6	84.618	1.4008	55.7167	1.4928	52.434	1.6412	40.2283	1.1936
Day of Pregnancy	Treatment	n	Blood Vessels		Blood Vessel Stroma					
			Mean	SEM	Mean	SEM				
4.5 IS	Saline	6	66.532	1.6504	57.3465	2.1307				
4.5 NIS	Saline	6	64.472	1.8904	53.5383	1.681				
4.5 IS	RU486	6	50.129	2.391	45.1617	1.7603				
4.5 NIS	RU486	6	57.47	1.8791	53.6517	1.7522				
5.5 IS	Saline	6	95.807	1.845	74.745	1.0183				
5.5 NIS	Saline	6	79.225	1.9886	55.265	1.5699				
5.5 IS	RU486	6	54.34	1.7449	45.174	2.0485				
5.5 NIS	RU486	6	47.427	1.3537	35.4033	2.1703				
6.5 IS	Saline	7	86.215	1.3606	39.5567	1.8501				
6.5 NIS	Saline	7	107.114	1.578	77.13	1.5252				
6.5 IS	RU486	6	53.374	1.9276	55.265	1.5699				
6.5 NIS	RU486	6	46.923	1.6013	46.58	1.5235				

IS – implantation sites, NIS – non-implantation sites.

Table 9.11 Tests for homogeneity of the data (equality of variance) for VEGF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests ($p=0.05$)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	0.4297	11	62	0.9369
Brown-Forsythe	0.3754	11	62	0.9609
Levene	0.3627	11	62	0.9656
Bartlett	0.2475	11	-	0.9939
Subepithelial Stroma				
O'Brien[.5]	0.3278	11	62	0.9766
Brown-Forsythe	0.2756	11	62	0.9883
Levene	0.2959	11	62	0.9844
Bartlett	0.1513	11	-	0.9994
Glandular Epithelium				
O'Brien[.5]	0.445	11	62	0.929
Brown-Forsythe	0.2628	11	62	0.9904
Levene	0.3392	11	62	0.9733
Bartlett	0.2257	11	-	0.9959
Glandular Stroma				
O'Brien[.5]	0.1975	11	62	0.9972
Brown-Forsythe	0.2413	11	62	0.9933
Levene	0.2626	11	62	0.9904
Bartlett	0.1834	11	-	0.9984
Blood Vessels				
O'Brien[.5]	0.4177	11	62	0.9428
Brown-Forsythe	0.4032	11	62	0.9495
Levene	0.4453	11	62	0.9288
Bartlett	0.2158	11	-	0.9967
Stroma surrounding the Blood Vessels				
O'Brien[.5]	0.8223	11	62	0.6183
Brown-Forsythe	0.6185	11	62	0.8061
Levene	0.7999	11	62	0.6396
Bartlett	0.4917	11	-	0.9097

$p>0.05$ so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.12 Welch ANOVA test for significant differences between the mean VEGF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
269.316	11	24.27	<.0001
Subepithelial Stroma			
73.2933	11	24.305	<.0001
Glandular Epithelium			
500.4808	11	24.295	<.0001
Blood Vessels			
44.2717	11	24.285	<.0001
Stroma Surrounding the Blood Vessels			
118.8623	11	24.246	<.0001

$p<0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean VEGF protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: not significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: not significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: not significantly different
6.5T IS vs. 5.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: not significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: not significantly different
5.5T IS vs. 4.5T IS: not significantly different
6.5T IS vs. 5.5T IS: not significantly different
4.5T NIS vs. 5.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: not significantly different
5.5UT IS vs. 6.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
4.5T IS vs. 5.5T IS: not significantly different
6.5T IS vs. 5.5T IS: not significantly different

4.5T NIS vs. 5.5T NIS: not significantly different
 5.5T NIS vs. 6.5T NIS: not significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: not significantly different
 5.5UT IS vs. 5.5T IS: significantly different
 5.5UT NIS vs. 5.5T NIS: significantly different
 6.5UT IS vs. 6.5T IS: significantly different
 6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the blood vessels (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
 5.5UT IS vs. 6.5UT IS: significantly different
 5.5UT NIS vs. 4.5UT NIS: significantly different
 6.5UT NIS vs. 5.5UT NIS: significantly different
 5.5T IS vs. 4.5T IS: not significantly different
 5.5T IS vs. 6.5T IS: not significantly different
 4.5T NIS vs. 5.5T NIS: significantly different
 5.5T NIS vs. 6.5T NIS: not significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: not significantly different
 5.5UT IS vs. 5.5T IS: significantly different
 5.5UT NIS vs. 5.5T NIS: significantly different
 6.5UT IS vs. 6.5T IS: significantly different
 6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the stroma surrounding the blood vessels (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: not significantly different
 6.5UT IS vs. 5.5UT IS: not significantly different
 5.5UT NIS vs. 4.5UT NIS: not significantly different
 6.5UT NIS vs. 5.5UT NIS: significantly different
 5.5T IS vs. 4.5T IS: not significantly different
 6.5T IS vs. 5.5T IS: not significantly different
 4.5T NIS vs. 5.5T NIS: significantly different
 6.5T NIS vs. 5.5T NIS: not significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5T NIS vs. 4.5UT NIS: not significantly different
 5.5UT IS vs. 5.5T IS: significantly different
 5.5UT NIS vs. 5.5T NIS: significantly different
 6.5UT IS vs. 6.5T IS: significantly different
 6.5UT NIS vs. 6.5T NIS: significantly different

9.17.2 Statistical analysis of bFGF protein expression

9.17.2.1 Summaries of Statistics Tests for Significant Differences in the Mean bFGF Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.13 Mean and standard error of the mean values of bFGF protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	66.025	1.8236	38.145	1.9359	69.66	1.7758	48.4417	1.3735
4.5 NIS	Saline	6	71.188	1.6639	46.4317	1.7259	81.58	1.9205	46.3467	1.5829
4.5 IS	RU486	6	48.16	1.8797	28.27	1.3225	47.664	1.8927	43.135	1.3273
4.5 NIS	RU486	6	39.378	1.8019	27.1083	1.3702	61.608	1.6267	50.595	1.2428
5.5 IS	Saline	6	124.745	1.4471	73.675	1.6306	134.955	1.2206	43.985	1.4855
5.5 NIS	Saline	6	114.388	1.3626	49.7483	1.2977	144.596	1.9382	67.8333	1.7515
5.5 IS	RU486	6	63.062	1.2898	32.9233	1.6542	38.929	1.1624	30.7617	1.404
5.5 NIS	RU486	6	46.537	1.8141	39.2367	1.3745	32.329	1.55	27.7233	1.928
6.5 IS	Saline	7	119.191	1.249	67.8043	1.3267	134.94	1.1961	56.4571	1.5214
6.5 NIS	Saline	7	114.416	1.2209	62.3814	1.1762	136.37	1.4384	69.44	1.793
6.5 IS	RU486	6	66.558	1.8497	42.085	1.4379	65.791	1.26	40.225	1.105
6.5 NIS	RU486	6	57.391	1.4624	41.4533	1.2111	51.169	1.2103	39.1733	1.4954
Day of Pregnancy	Treatment	n	Blood Vessels		Blood Vessel Stroma					
			Mean	SEM	Mean	SEM				
4.5 IS	Saline	6	67.952	1.7801	54.5733	1.4929				
4.5 NIS	Saline	6	66.61	1.6304	52.625	1.6811				
4.5 IS	RU486	6	50.1	1.9331	43.0683	1.5405				
4.5 NIS	RU486	6	56.392	1.3904	53.9	1.3346				
5.5 IS	Saline	6	106.748	1.5096	78.1633	1.1747				
5.5 NIS	Saline	6	102.012	1.8455	66.235	1.1455				
5.5 IS	RU486	6	51.959	1.7514	44.1167	1.5147				
5.5 NIS	RU486	6	39.86	1.4153	28.4867	0.8995				
6.5 IS	Saline	7	81.617	1.6124	78.3086	0.8388				
6.5 NIS	Saline	7	104.344	1.2905	64.3114	1.1054				
6.5 IS	RU486	6	59.788	1.8306	43.6467	1.4175				
6.5 NIS	RU486	6	45.989	1.4929	36.4067	1.4357				

IS – implantation sites, NIS – non-implantation sites.

Table 9.14 Tests for homogeneity of the data (equality of variance) for bFGF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests ($p=0.05$)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	0.3281	11	62	0.9765
Brown-Forsythe	0.1189	11	62	0.9997
Levene	0.2055	11	62	0.9967
Bartlett	0.2179	11	-	0.9965
Subepithelial Stroma				
O'Brien[.5]	0.5161	11	62	0.8853
Brown-Forsythe	0.4431	11	62	0.93
Levene	0.5177	11	62	0.8842
Bartlett	0.2019	11	-	0.9976
Glandular Epithelium				
O'Brien[.5]	0.5647	11	62	0.8498
Brown-Forsythe	0.4611	11	62	0.92
Levene	0.4965	11	62	0.8983
Bartlett	0.3593	11	-	0.9713
Glandular Stroma				
O'Brien[.5]	0.542	11	62	0.8669
Brown-Forsythe	0.3307	11	62	0.9758
Levene	0.5042	11	62	0.8933
Bartlett	0.2828	11	-	0.9892
Blood Vessels				
O'Brien[.5]	0.2834	11	62	0.9869
Brown-Forsythe	0.166	11	62	0.9987
Levene	0.2172	11	62	0.9957
Bartlett	0.1372	11	-	0.9996
Stroma surrounding the Blood Vessels				
O'Brien[.5]	0.6656	11	62	0.765
Brown-Forsythe	0.481	11	62	0.9081
Levene	0.7488	11	62	0.688
Bartlett	0.372	11	-	0.9672

$p>0.05$ so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.15 Welch ANOVA test for significant differences between the mean bFGF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
352.5951	11	24.229	<.0001
Subepithelial Stroma			
89.48	11	24.262	<.0001
Glandular Epithelium			
716.2079	11	24.257	<.0001
Blood Vessels			
62.5849	11	24.323	<.0001
Stroma Surrounding the Blood Vessels			
193.2657	11	24.269	<.0001

$p<0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean bFGF protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: not significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: not significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: not significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: not significantly different
6.5T IS vs. 5.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
4.5T IS vs. 5.5T IS: significantly different
6.5T IS vs. 5.5T IS: significantly different
4.5T NIS vs. 5.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: not significantly different
4.5T IS vs. 5.5T IS: significantly different
6.5T IS vs. 5.5T IS: significantly different
4.5T NIS vs. 5.5T NIS: significantly different

6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: not significantly different
4.5T NIS vs. 4.5UT NIS: not significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the blood vessels (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: not significantly different
5.5T IS vs. 4.5T IS: not significantly different
6.5T IS vs. 5.5T IS: not significantly different
4.5T NIS vs. 5.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the stroma surrounding the blood vessels (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: not significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: not significantly different
5.5T IS vs. 4.5T IS: not significantly different
5.5T IS vs. 6.5T IS: not significantly different
4.5T NIS vs. 5.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5T NIS vs. 4.5UT NIS: not significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

9.17.3 Statistical analysis of PDGF protein expression

9.17.3.1 Summaries of Statistics Tests for Significant Differences in the Mean PDGF Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.16 Mean and standard error of the mean values of PDGF protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	63.408	2.1995	47.008	1.2575	48.516	1.4611	42.7083	1.4115
4.5 NIS	Saline	6	57.293	1.6612	51.321	1.2029	52.398	1.5101	43.7333	1.4127
4.5 IS	RU486	6	84.666	1.9917	56.473	1.6892	53.643	1.8045	40.6083	1.2349
4.5 NIS	RU486	6	93.346	2.001	66.221	1.7965	59.45	1.9396	43.0754	1.4358
5.5 IS	Saline	6	123.899	1.7197	102.283	1.8741	156.248	1.5496	97.5862	1.8534
5.5 NIS	Saline	6	99.555	1.5521	66.543	1.2042	90.34	1.0206	55.3819	1.3773
5.5 IS	RU486	6	103.363	1.4273	79.649	2.0368	86.1	1.6307	56.6085	1.2888
5.5 NIS	RU486	6	102.815	1.2444	77.008	2.0618	87.146	1.8331	59.4754	1.3832
6.5 IS	Saline	7	65.465	1.3473	60.71	1.3631	70.087	0.8638	55.8448	1.0818
6.5 NIS	Saline	7	72.879	1.5662	55.849	1.6168	58.704	1.4277	43.6979	1.1307
6.5 IS	RU486	6	105.213	1.5839	80.874	1.353	98.533	1.1792	56.0712	1.7746
6.5 NIS	RU486	6	129.752	1.3825	85.859	1.6377	83.406	1.3306	62.6283	1.2854
Day of Pregnancy	Treatment	n	Blood Vessels		Blood Vessel Stroma					
			Mean	SEM	Mean	SEM				
4.5 IS	Saline	6	51.54	1.4788	45.748	1.2927				
4.5 NIS	Saline	6	51.837	0.9928	41.477	1.782				
4.5 IS	RU486	6	57.647	1.7444	43.781	1.1914				
4.5 NIS	RU486	6	69.418	1.3231	46.721	1.1435				
5.5 IS	Saline	6	125.058	1.9746	103.545	1.3477				
5.5 NIS	Saline	6	82.516	1.4112	65.834	1.4467				
5.5 IS	RU486	6	90.618	1.2942	58.923	1.7915				
5.5 NIS	RU486	6	99.059	1.2494	68.649	1.5871				
6.5 IS	Saline	7	69.555	1.1078	70.372	1.4364				
6.5 NIS	Saline	7	67.214	1.0626	42.787	1.8429				
6.5 IS	RU486	6	82.486	1.3062	66.577	1.7507				
6.5 NIS	RU486	6	82.086	1.3334	60.102	1.8742				

IS – implantation sites, NIS – non-implantation sites.

Table 9.17 Tests for homogeneity of the data (equality of variance) for PDGF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests ($p=0.05$)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	0.5893	11	62	0.8304
Brown-Forsythe	0.5819	11	62	0.8363
Levene	0.6299	11	62	0.7964
Bartlett	0.271	11	-	0.991
Subepithelial Stroma				
O'Brien[.5]	0.638	11	62	0.7894
Brown-Forsythe	0.5865	11	62	0.8326
Levene	0.6731	11	62	0.7582
Bartlett	0.3506	11	-	0.9739
Glandular Epithelium				
O'Brien[.5]	0.6651	11	62	0.7654
Brown-Forsythe	0.6406	11	62	0.7871
Levene	0.7265	11	62	0.709
Bartlett	0.4718	11	-	0.9216
Glandular Stroma				
O'Brien[.5]	0.5052	11	62	0.8926
Brown-Forsythe	0.2462	11	62	0.9927
Levene	0.3181	11	62	0.9792
Bartlett	0.2086	11	-	0.9972
Blood Vessels				
O'Brien[.5]	0.6135	11	62	0.8103
Brown-Forsythe	0.3271	11	62	0.9768
Levene	0.387	11	62	0.9564
Bartlett	0.3403	11	-	0.9768
Stroma surrounding the Blood Vessels				
O'Brien[.5]	0.537	11	62	0.8706
Brown-Forsythe	0.575	11	62	0.8418
Levene	0.5261	11	62	0.8783
Bartlett	0.3135	11	-	0.9834

$p>0.05$ so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.18 Welch ANOVA test for significant differences between the mean PDGF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
175.5353	11	24.268	<.0001
Subepithelial Stroma			
84.1397	11	24.277	<.0001
Glandular Epithelium			
305.2408	11	24.174	<.0001
Blood Vessels			
70.5629	11	24.236	<.0001
Stroma Surrounding the Blood Vessels			
159.421	11	24.236	<.0001

$p<0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean PDGF protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5T IS vs. 4.5UT IS: significantly different
4.5T NIS vs. 4.5UT NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5T NIS vs. 5.5UT NIS: not significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5T IS vs. 4.5UT IS: significantly different
4.5T NIS vs. 4.5UT NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5T IS vs. 4.5UT IS: not significantly different
4.5T NIS vs. 4.5UT NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: not significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
5.5T IS vs. 6.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: significantly different

6.5T NIS vs. 5.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: not significantly different
4.5T NIS vs. 4.5UT NIS: not significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5T NIS vs. 5.5UT NIS: not significantly different
6.5T IS vs. 6.5UT IS: not significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the blood vessels (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
5.5T IS vs. 6.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: significantly different
5.5T NIS vs. 6.5T NIS: significantly different
4.5T IS vs. 4.5UT IS: not significantly different
4.5T NIS vs. 4.5UT NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the stroma surrounding the blood vessels (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: significantly different
5.5T NIS vs. 6.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: not significantly different
4.5T NIS vs. 4.5UT NIS: not significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5T NIS vs. 5.5UT NIS: not significantly different
6.5UT IS vs. 6.5T IS: not significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

9.18 Statistical Analysis of Protein Expression of the Endometrial Biomarkers

9.18.1 Statistical analysis of LIF protein expression

9.18.1.1 Summaries of Statistics Tests for Significant Differences in the Mean LIF Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.19 Mean and standard error of the mean values of LIF protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	156.408	5.4055	92.238	3.3916	159.085	8.9217	65.8550	6.3581
4.5 NIS	Saline	6	177.570	2.6304	127.207	2.8033	151.438	1.8209	79.9633	2.4520
4.5 IS	RU486	6	109.792	2.4219	53.123	2.4824	79.573	6.1895	40.9417	1.5806
4.5 NIS	RU486	6	127.282	5.5551	70.397	1.4950	110.555	6.4328	60.6383	3.4266
5.5 IS	Saline	6	192.878	6.9247	120.102	4.9181	152.040	5.0466	74.7367	2.1754
5.5 NIS	Saline	6	183.423	6.6738	112.248	4.9416	156.453	4.3642	82.4150	3.5840
5.5 IS	RU486	6	150.527	4.2880	73.202	2.2782	150.657	3.6885	56.6167	3.2739
5.5 NIS	RU486	6	144.047	3.5956	91.308	2.5982	136.950	4.8675	38.9900	2.7785
6.5 IS	Saline	6	105.213	4.0884	68.867	2.7390	84.815	4.5158	40.6300	2.6269
6.5 NIS	Saline	6	123.247	3.1176	76.263	2.2632	98.712	3.5901	39.2700	1.5430
6.5 IS	RU486	6	157.695	4.0480	69.925	2.5940	117.198	3.1284	49.8533	2.7122
6.5 NIS	RU486	6	124.583	4.3102	55.108	3.5809	89.505	4.2920	41.9433	2.5692

IS – implantation sites, NIS – non-implantation sites.

Table 9.20 Tests for homogeneity of the data (equality of variance) for LIF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests (p=0.05)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	1.2503	11	60	0.2754
Brown-Forsythe	1.3851	11	60	0.2036
Levene	1.5370	11	60	0.1422
Bartlett	1.0029	11	.	0.4406
Subepithelial Stroma				
O'Brien[.5]	2.0742	11	60	0.0363
Brown-Forsythe	1.1349	11	60	0.3514
Levene	1.9536	11	60	0.0498
Bartlett	1.0633	11	.	0.3869
Glandular Epithelium				
O'Brien[.5]	2.5708	11	60	0.0097
Brown-Forsythe	1.2709	11	60	0.2633
Levene	3.0544	11	60	0.0026
Bartlett	1.3524	11	.	0.1882
Glandular Stroma				
O'Brien[.5]	3.7030	11	60	0.0005
Brown-Forsythe	1.2915	11	60	0.2516
Levene	3.4922	11	60	0.0008
Bartlett	1.5037	11	.	0.1222

p>0.05 so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.21 Welch ANOVA test for significant differences between the mean LIF protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals (p=0.05)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
43.5837	11	23.553	<0.0001
Subepithelial Stroma			
47.2025	11	23.546	<0.0001
Glandular Epithelium			
42.0899	11	23.431	<0.0001
Glandular Stroma			
35.1964	11	23.545	<0.0001

p<0.05 therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean LIF protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: not significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
6.5T IS vs. 5.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: not significantly different
5.5T NIS vs. 6.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: not significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
4.5UT NIS vs. 5.5UT NIS: not significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
5.5T IS vs. 6.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: significantly different
5.5T NIS vs. 6.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5T IS vs. 6.5UT IS: not significantly different
6.5UT NIS vs. 6.5T NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: not significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: not significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
5.5T IS vs. 6.5T IS: significantly different

5.5T NIS vs. 4.5T NIS: significantly different
 5.5T NIS vs. 6.5T NIS: significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: significantly different
 5.5UT IS vs. 5.5T IS: not significantly different
 5.5UT NIS vs. 5.5T NIS: not significantly different
 6.5T IS vs. 6.5UT IS: not significantly different
 6.5UT NIS vs. 6.5T NIS: not significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

5.5UT IS vs. 4.5UT IS: not significantly different
 5.5UT IS vs. 6.5UT IS: significantly different
 5.5UT NIS vs. 4.5UT NIS: not significantly different
 5.5UT NIS vs. 6.5UT NIS: significantly different
 5.5T IS vs. 4.5T IS: significantly different
 5.5T IS vs. 6.5T IS: not significantly different
 4.5T NIS vs. 5.5T NIS: significantly different
 6.5T NIS vs. 5.5T NIS: not significantly different
 4.5UT IS vs. 4.5T IS: significantly different
 4.5UT NIS vs. 4.5T NIS: significantly different
 5.5UT IS vs. 5.5T IS: significantly different
 5.5UT NIS vs. 5.5T NIS: significantly different
 6.5T IS vs. 6.5UT IS: not significantly different
 6.5T NIS vs. 6.5UT NIS: not significantly different

9.18.2 Statistical analysis of Muc-1 protein expression

9.18.1.2 Summaries of Statistics Tests for Significant Differences in the Mean Muc-1 Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.22 Mean and standard error of the mean values of Muc-1 protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	75.6183	4.8143	28.0717	1.9792	58.1917	3.2905	26.3900	2.5382
4.5 NIS	Saline	6	78.2233	3.8718	20.1483	1.0056	51.8617	2.4299	24.6950	1.7265
4.5 IS	RU486	6	62.8500	2.4717	40.8933	1.8602	42.0933	3.0735	28.4150	2.7686
4.5 NIS	RU486	6	69.2017	2.1493	30.3700	1.9592	46.2067	2.2673	19.9667	1.3212
5.5 IS	Saline	6	34.4133	1.6131	17.1367	1.3838	8.7150	1.1094	3.2000	0.4168
5.5 NIS	Saline	6	35.6883	1.3468	15.4167	0.8402	10.6917	1.2210	2.5183	0.2746
5.5 IS	RU486	6	62.4833	2.7046	29.8783	2.1539	43.2700	1.9196	24.3067	2.0206
5.5 NIS	RU486	6	74.2650	2.9446	40.0817	2.4883	37.0083	2.4487	16.1083	1.7781
6.5 IS	Saline	6	60.4200	2.6584	22.4700	1.2181	39.3333	3.1930	16.4167	2.6159
6.5 NIS	Saline	6	42.0683	3.4055	17.8550	1.5060	32.3433	2.8159	11.6700	0.7749
6.5 IS	RU486	6	81.1250	4.9516	34.5183	3.0606	50.0333	3.9038	30.0500	1.3886
6.5 NIS	RU486	6	84.3950	5.2998	36.0217	3.3814	42.1217	3.5126	19.9767	2.2685

IS – implantation sites, NIS – non-implantation sites.

Table 9.23 Tests for homogeneity of the data (equality of variance) for Muc-1 protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests ($p=0.05$)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	2.1858	11	60	0.0271
Brown-Forsythe	1.7947	11	60	0.0750
Levene	2.9493	11	60	0.0035
Bartlett	1.5669	11	.	0.1011
Subepithelial Stroma				
O'Brien[.5]	1.2382	11	60	0.2827
Brown-Forsythe	1.3021	11	60	0.2457
Levene	1.4771	11	60	0.1642
Bartlett	1.5565	11	.	0.1043
Glandular Epithelium				
O'Brien[.5]	0.9279	11	60	0.5203
Brown-Forsythe	0.7107	11	60	0.7235
Levene	1.4145	11	60	0.1902
Bartlett	1.1573	11	.	0.3113
Glandular Stroma				
O'Brien[.5]	1.5384	11	60	0.1418
Brown-Forsythe	1.5377	11	60	0.1420
Levene	2.6245	11	60	0.0084
Bartlett	3.0604	11	.	0.0004

$p>0.05$ so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.24 Welch ANOVA test for significant differences between the mean Muc-1 protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
41.1497	11	23.478	<0.0001
Subepithelial Stroma			
22.3459	11	23.496	<0.0001
Glandular Epithelium			
63.5942	11	23.449	<0.0001
Glandular Stroma			
76.3428	11	22.934	<0.0001

$p<0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean Muc-1 protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different

6.5UT IS vs. 5.5UT IS: significantly different

4.5UT NIS vs. 5.5UT NIS: significantly different

6.5UT NIS vs. 5.5UT NIS: not significantly different

4.5T IS vs. 5.5T IS: not significantly different

6.5T IS vs. 5.5T IS: significantly different

5.5T NIS vs. 4.5T NIS: not significantly different

6.5T NIS vs. 5.5T NIS: not significantly different

4.5UT IS vs. 4.5T IS: not significantly different

4.5UT NIS vs. 4.5T NIS: not significantly different

5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: not significantly different
4.5UT NIS vs. 5.5UT NIS: not significantly different
6.5UT NIS vs. 5.5UT NIS: not significantly different
4.5T IS vs. 5.5T IS: significantly different
6.5T IS vs. 5.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: not significantly different
5.5T NIS vs. 6.5T NIS: not significantly different
4.5T IS vs. 4.5UT IS: significantly different
4.5T NIS vs. 4.5UT NIS: significantly different
5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different
5.5UT IS vs. 6.5UT IS: significantly different
5.5UT NIS vs. 4.5UT NIS: significantly different
5.5UT NIS vs. 6.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: not significantly different
5.5T IS vs. 6.5T IS: not significantly different
5.5T NIS vs. 4.5T NIS: not significantly different
5.5T NIS vs. 6.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5UT IS vs. 5.5T IS: significantly different
5.5UT NIS vs. 5.5T NIS: significantly different
6.5T IS vs. 6.5UT IS: not significantly different
6.5UT NIS vs. 6.5T NIS: not significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: significantly different
4.5UT NIS vs. 5.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
4.5T IS vs. 5.5T IS: not significantly different
6.5T IS vs. 5.5T IS: not significantly different
4.5T NIS vs. 5.5T NIS: not significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5T IS vs. 4.5UT IS: not significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5T IS vs. 6.5UT IS: significantly different
6.5T NIS vs. 6.5UT NIS: not significantly different

9.18.3 Statistical analysis of Calcitonin protein expression

9.18.1.2 Summaries of Statistics Tests for Significant Differences in the Mean Calcitonin Protein Expression in the Regions of Interest of the Control Pregnant and RU486-Treated Animals at Days 4.5, 5.5 and 6.5 of Pregnancy

Table 9.25 Mean and standard error of the mean values of Calcitonin protein expression in the regions of interest of the control pregnant and RU486-treated animals at day 4.5, 5.5 and 6.5 of pregnancy.

Day of Pregnancy	Treatment	n	Luminal Epithelium		Subepithelial Stroma		Glandular Epithelium		Glandular Stroma	
			Mean	SEM	Mean	SEM	Mean	SEM	Mean	SEM
4.5 IS	Saline	6	59.7717	3.3367	9.9100	1.3318	36.4483	1.9178	2.37167	0.3377
4.5 NIS	Saline	6	54.1967	1.6620	8.4800	1.3994	32.2000	3.1037	2.06333	0.3095
4.5 IS	RU486	6	28.3117	3.0394	3.3883	0.3514	18.1450	0.6385	1.23167	0.1766
4.5 NIS	RU486	6	38.6600	2.8463	5.4733	0.2616	29.6117	1.3942	1.90167	0.1822
5.5 IS	Saline	6	38.2000	1.7151	2.6067	0.2531	12.7533	1.2000	0.83500	0.1344
5.5 NIS	Saline	6	40.5400	2.0495	1.4917	0.1605	10.4550	0.1921	1.29167	0.1904
5.5 IS	RU486	6	41.2367	2.9712	10.4233	0.9456	27.1317	2.4496	7.44667	1.0549
5.5 NIS	RU486	6	37.8650	2.9053	3.4150	0.3445	29.2217	1.6712	2.53333	0.1845
6.5 IS	Saline	6	61.5800	4.1116	13.7683	0.9370	26.7592	2.6996	4.78667	0.4725
6.5 NIS	Saline	6	43.1817	2.7573	11.4583	1.2303	27.2100	2.5927	3.59333	0.2519
6.5 IS	RU486	6	48.3817	2.5031	9.0433	1.2553	30.3900	2.8212	3.38000	0.3579
6.5 NIS	RU486	6	45.4450	3.0573	8.4367	1.1682	25.5133	1.6721	3.12833	0.3529

IS – implantation sites, NIS – non-implantation sites.

Table 9.26 Tests for homogeneity of the data (equality of variance) for Calcitonin protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests (p=0.05)

N.H.: The variances are equal.

Test	F Ratio	DF NUM	DF DEN	Prob>F
Luminal Epithelium				
O'Brien[.5]	1.0251	11	60	0.4363
Brown-Forsythe	0.8795	11	60	0.5646
Levene	1.1636	11	60	0.3312
Bartlett	0.6068	11	.	0.8248
Subepithelial Stroma				
O'Brien[.5]	1.4217	11	60	0.1870
Brown-Forsythe	2.5010	11	60	0.0117
Levene	4.3308	11	60	<0.0001
Bartlett	3.9696	11	.	<0.0001
Glandular Epithelium				
O'Brien[.5]	1.5517	11	60	0.1373
Brown-Forsythe	2.0232	11	60	0.0415
Levene	2.4234	11	60	0.0144
Bartlett	3.0009	11	.	0.0005

p>0.05 so the N.H. is rejected. Therefore there is an inequality of variances and the Welch ANOVA is used.

Table 9.27 Tests for homogeneity of the data (equality of variance) for Calcitonin protein expression in the glandular stroma in the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in control pregnant and RU486-treated animals, using the O'Brien's, Brown-Forsythe's, Levene's and Bartlett's tests ($p=0.05$)

N.H.: The variances are equal.

Glandular Stroma				
O'Brien[.5]	3.7988	11	60	0.0004
Brown-Forsythe	3.0830	11	60	0.0024
Levene	4.6492	11	60	<0.0001
Bartlett	3.8047	11	.	<0.0001

$p<0.05$ so the N.H. cannot be rejected. Therefore the variances are equal and the usual ANOVA is used.

Table 9.28 Welch ANOVA test for significant differences between the mean Calcitonin protein expression in the regions of interest of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 72

F Ratio	DF NUM	DF DEN	Prob > F
Luminal Epithelium			
9.2947	11	23.571	<0.0001
Subepithelial Stroma			
35.8184	11	23.241	<0.0001
Glandular Epithelium			
58.3778	11	22.264	<0.0001

$p<0.05$ therefore the N.H. cannot be rejected. Therefore there may be a significant difference between the mean Calcitonin protein expression in the regions of interest of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals.

Table 9.29 One-way analysis of variance test for significant differences between the mean Calcitonin protein expression in the glandular stroma of the implantation and non-implantation sites at day 4.5, 5.5 and 6.5 of pregnancy in the control pregnant and RU486-treated animals ($p=0.05$)

N.H.: There is a significant difference between the means.

Total Number of Observations: 48

Source	DF	Sum of Squares	Mean Square	F Ratio
Model	11	220.40896	20.0372	19.8911
Error	60	60.44063	1.0073	Prob > F
C Total	71	280.84959	.	<0.0001

$p<0.05$ so the N.H. cannot be rejected. Therefore there is a significant difference between the mean Calcitonin protein expression in the glandular stroma of the implantation and non-implantation sites at days 4.5, 5.5 and 6.5 of pregnancy in the RU486-treated and pregnant control animals.

Results of the Tukey-Kramer *post hoc* test for the luminal epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different

6.5UT IS vs. 5.5UT IS: significantly different

4.5UT NIS vs. 5.5UT NIS: significantly different

6.5UT NIS vs. 5.5UT NIS: not significantly different

5.5T IS vs. 4.5T IS: not significantly different

6.5T IS vs. 5.5T IS: not significantly different

4.5T NIS vs. 5.5T NIS: not significantly different

6.5T NIS vs. 5.5T NIS: not significantly different

4.5UT IS vs. 4.5T IS: significantly different

4.5UT NIS vs. 4.5T NIS: significantly different

5.5T IS vs. 5.5UT IS: not significantly different

5.5UT NIS vs. 5.5T NIS: not significantly different

6.5UT IS vs. 6.5T IS: not significantly different

6.5T NIS vs. 6.5UT NIS: not significantly different

Results of the Tukey-Kramer *post hoc* test for the subepithelial stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: significantly different
4.5UT NIS vs. 5.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
5.5T IS vs. 6.5T IS: not significantly different
4.5T NIS vs. 5.5T NIS: not significantly different
6.5T NIS vs. 5.5T NIS: significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: not significantly different
6.5UT IS vs. 6.5T IS: significantly different
6.5UT NIS vs. 6.5T NIS: not significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular epithelium (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: significantly different
6.5UT IS vs. 5.5UT IS: significantly different
4.5UT NIS vs. 5.5UT NIS: significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: not significantly different
6.5T IS vs. 5.5T IS: not significantly different
4.5T NIS vs. 5.5T NIS: not significantly different
5.5T NIS vs. 6.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: significantly different
6.5T IS vs. 6.5UT IS: not significantly different
6.5UT NIS vs. 6.5T NIS: not significantly different

Results of the Tukey-Kramer *post hoc* test for the glandular stroma (groups are arranged with the means in descending order from left to right). UT - untreated; T- RU486-treated.

4.5UT IS vs. 5.5UT IS: not significantly different
6.5UT IS vs. 5.5UT IS: significantly different
4.5UT NIS vs. 5.5UT NIS: not significantly different
6.5UT NIS vs. 5.5UT NIS: significantly different
5.5T IS vs. 4.5T IS: significantly different
5.5T IS vs. 6.5T IS: significantly different
5.5T NIS vs. 4.5T NIS: not significantly different
6.5T NIS vs. 5.5T NIS: not significantly different
4.5UT IS vs. 4.5T IS: not significantly different
4.5UT NIS vs. 4.5T NIS: not significantly different
5.5T IS vs. 5.5UT IS: significantly different
5.5T NIS vs. 5.5UT NIS: not significantly different
6.5UT IS vs. 6.5T IS: not significantly different
6.5UT NIS vs. 6.5T NIS: not significantly different