<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Summary of studies that have investigated semen parameters in overweight and obese men compared with normal-weight men with a BMI of &gt;18.5 and &lt;24.99</td>
<td>46</td>
</tr>
<tr>
<td>2</td>
<td>World Health Organization (1999) criteria for normal semen analysis</td>
<td>96</td>
</tr>
<tr>
<td>3</td>
<td>Distribution of 250 subjects with respect to the fertility condition.</td>
<td>97</td>
</tr>
<tr>
<td>4</td>
<td>Subjects including cases and controls used for different experiments in the present study.</td>
<td>98</td>
</tr>
<tr>
<td>5</td>
<td>Sequences of exon specific primers for Real-time PCR and HRM analysis of the <em>JHDM2A</em> gene</td>
<td>99</td>
</tr>
<tr>
<td>6</td>
<td>Size of the exons and length of the amplified PCR product.</td>
<td>99</td>
</tr>
<tr>
<td>7</td>
<td>Real time-PCR set up conditions and Heteroduplex formation for HRM analysis of the 3 exons of <em>JHDM2A</em> gene</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
<td>Age-wise distribution of 250 subjects with different condition and 100 controls.</td>
<td>119</td>
</tr>
<tr>
<td>9</td>
<td>Distribution of obese males with respect to Body Mass Index (BMI)</td>
<td>120</td>
</tr>
<tr>
<td>10</td>
<td>Physical assessment of semen in cases and controls (N= Normal, Ab= Abnormal).</td>
<td>121</td>
</tr>
<tr>
<td>11</td>
<td>Description of age, BMI and semen parameters of the cases (excluding aspermia and azoospermia) and</td>
<td>122</td>
</tr>
</tbody>
</table>
controls (N= Number of individuals, Minimum=Minimum levels of the parameters, Maximum=Maximum levels of the parameters).

12 One way ANOVA of BMI and semen parameters (excluding aspermia and azoospermia)

13 Description of cases (excluding aspermia) and controls with different variables. (N= Number of individuals, Minimum=Minimum levels of the parameters, Maximum=Maximum levels of the parameters)

14 One way ANOVA of BMI and semen parameters (excluding aspermia).

15 Distribution of different infertility conditions among 200 obese and non-obese infertile subjects.

16 Age-wise distribution of different infertility conditions among obese infertile and non-obese infertile groups (n=200).

17 Distribution of different study groups based on the presence of leukocyte in semen samples of the cases.

18 Pearson correlation between BMI and quantitative semen parameters among cases and controls. (NS=non significant, r= Correlation coefficient, p= significant value)

19 Pearson correlation between age and quantitative semen parameters among cases and controls. (NS=non significant, r= Correlation coefficient, p= significant value)

20 Pedigree analysis of 100 non-obese infertile cases and 100 controls in Mysore
21 Pedigree analysis of 50 obese fertile cases and 100 controls
22 Pedigree analysis of 100 obese infertile cases and 100 controls in Mysore.
23 Description of age, BMI and semen parameters of cases and controls included in seminal ROS, LPO and IL-6 analysis. (N= Number of individuals, Minimum=Minimum levels of the parameters, Maximum=Maximum levels of the parameters).
24 Mean and standard deviation of the seminal seminal Reactive Oxygen Species (ROS) and LPO (MDA) levels in cases and controls.
25 One way ANOVA on seminal Reactive Oxygen Species (ROS) and LPO (MDA) levels in cases and controls.
26 Pairwise comparison of seminal lipid peroxidation (LPO) between all groups in the study. (NS= Non significant)
27 Pairwise comparison of seminal ROS between all groups in the study.
28 Pearson correlation between seminal Reactive Oxygen Species (ROS) levels and semen parameters. (NS= non significant, r= Correlation coefficient, p= significant value).
29 Mean and Standard deviation of seminal IL-6 levels in different study groups.
30 One-way ANOVA on seminal IL-6 level in different groups in the study
31 Pairwise comparison of seminal IL-6 levels between all the groups.
32 Pearson correlation between seminal levels of IL-6,
BMI and semen parameters among cases and controls. 
(NS= non significant, r= Correlation coefficient, p= significant value).

33. Regression coefficient on effect of different predictors on sperm count.
34. Regression of predictors (Age, BMI, Alcohol, Laptop and smoking) on sperm count.
35. Regression coefficient on effect of different predictors on sperm morphology.
36. Regression of predictors (Age, BMI, Alcohol, Laptop and smoking) on sperm morphology.
37. Regression coefficient on effect of different predictors on sperm viability.
38. Regression of predictors (Age, BMI, Alcohol, Laptop and smoking) on sperm viability.
39. Regression coefficient on effect of different predictors on seminal ROS.
40. Regression of predictors (Age, BMI, Alcohol, Laptop and smoking) on seminal ROS.
41. Regression coefficient on effect of different predictors on Lipid peroxidation.
42. Regression of predictors (Age, BMI, Alcohol, Laptop and smoking) on seminal Lipid peroxidation.
43. Regression coefficient on effect of different predictors on seminal IL-6.
Regression of predictors (Age, BMI, Alcohol, Laptop and smoking) on seminal IL-6

Description of age, BMI and semen parameters of the cases and controls included in sperm PRM1 analysis.
(Minimum=Minimum levels of the parameters, Maximum=Maximum levels of the parameters).

One way ANOVA of all variables for all study groups included in sperm PRM1 analysis.

Pearson correlation of sperm PRM1, BMI and semen parameters of all participant samples. (NS= non significant, r= Correlation coefficient, p= significant value).

Description of 200 cases and 50 control subjects with obesity/and infertility for gene analysis.

Nucleotide sequences of the samples with variation after identified through sequencing.