Table S1. Estrogens and progestins commonly used in COCs. Adapted from (4)

|  |  |  |
| --- | --- | --- |
| **Estrogens** | | |
| Used in first COC, not commonly used | | Mestranol |
| Most commonly used estrogen | | Ethinyl estradiol (EE) |
| **Progestins** | | |
| First generation | Estranes derived from testosterone | Norethynodrel |
| Pregnanes derived from 17-OH progesterone | Medroxyprogesterone acetate (MPA) |
| Second generation | Gonanes derived from testosterone | Levonorgestrel (LNG) |
| Norgestrel (NG) |
| Third generation | Gonane (Levonorgestrel) derivatives | Desogestrol |
| Gestodene |
| Fourth generation | Non ethylated estranes: | Drospirenone (DRSP) |

Table S2. Viscoelastic parameters measured.

|  |  |  |
| --- | --- | --- |
| **Parameter** | **Unit of measurement** | **Description** |
| Reaction time (R) | Minutes | Initiation time |
| Kinetics (K) | Minutes | Amplification |
| Angle (α) | Angle in degrees | Thrombin burst |
| Maximal amplitude (MA) | mm | Overall stability of the clot |
| Maximum rate of thrombus formation (MRTG) | Dyn.cm-2.s-1 | The maximum velocity of clot growth |
| Time to maximum rate of thrombus formation (TMRTG) | Minutes | Time interval observed before maximum speed of the clot growth |
| Total thrombus generation (TTG) | Dyn.s-1 | Clot strength |

Table S3. TEG values for fresh WB samples without and with added constituents.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | C | EE1 | EE2 | DR | LE1 | LE2 | MX | NO |
| R | M | Median | 9.20 | 8.80 | 7.15 | 8.55 | 8.40 | 9.30 | 8.20 | 10.10 |
| Stdev | 2.75 | 3.64 | 4.26 | 1.60 | 4.28 | 6.93 | 3.24 | 5.42 |
| F | Median | 9.00 | 6.70 | 9.45 | 6.80 | 5.15 | 7.70 | 8.20 | 8.20 |
| Stdev | 1.76 | 1.96 | 2.75 | 2.55 | 2.47 | 1.69 | 2.09 | 1.66 |
| C | Median | 9.20 | 7.60 | 9.15 | 7.50 | 6.90 | 8.25 | 8.20 | 8.80 |
| Stdev | 2.21 | 2.82 | 3.51 | 2.05 | 3.88 | 5.12 | 2.62 | 4.03 |
| K | M | Median | 4.00 | 3.35 | 2.20 | 3.95 | 3.15 | 4.45 | 3.30 | 2.60 |
| Stdev | 4.36 | 6.46 | 2.50 | 2.60 | 2.11 | 2.01 | 2.72 | 3.76 |
| F | Median | 5.45 | 3.75 | 2.80 | 5.10 | 3.35 | 3.60 | 3.35 | 4.10 |
| Stdev | 2.68 | 2.81 | 2.84 | 6.44 | 2.74 | 1.35 | 1.54 | 2.55 |
| C | Median | 4.75 | 3.45 | 2.80 | 4.25 | 3.15 | 4.05 | 3.30 | 3.20 |
| Stdev | 3.47 | 4.78 | 2.55 | 4.87 | 2.34 | 1.63 | 2.12 | 2.98 |
| α | M | Median | 60.05 | 59.60 | 63.50 | 62.85 | 59.20 | 54.15 | 58.10 | 63.90 |
| Stdev | 7.79 | 5.97 | 17.10 | 9.00 | 7.36 | 13.49 | 9.85 | 11.88 |
| F | Median | 64.40 | 62.95 | 64.45 | 66.00 | 60.70 | 57.90 | 60.15 | 62.45 |
| Stdev | 7.28 | 9.76 | 10.18 | 11.85 | 9.44 | 10.24 | 11.65 | 9.44 |
| C | Median | 60.65 | 61.80 | 64.30 | 63.55 | 59.20 | 57.90 | 58.10 | 63.70 |
| Stdev | 7.32 | 7.76 | 13.81 | 10.14 | 8.38 | 11.47 | 10.33 | 10.42 |
| MA | M | Median | 29.00 | 25.90 | 31.85 | 25.15 | 25.50 | 24.85 | 30.10 | 35.80 |
| Stdev | 7.94 | 6.29 | 13.42 | 8.38 | 3.75 | 2.52 | 13.17 | 4.61 |
| F | Median | 26.60 | 28.50 | 29.35 | 27.10 | 26.45 | 30.55 | 27.45 | 24.25 |
| Stdev | 4.93 | 6.91 | 3.01 | 10.15 | 8.52 | 4.44 | 6.59 | 11.72 |
| C | Median | 26.60 | 26.20 | 29.95 | 25.15 | 26.45 | 27.00 | 28.90 | 34.70 |
| Stdev | 6.43 | 6.24 | 9.28 | 8.91 | 6.47 | 3.92 | 10.18 | 9.71 |
| MRTG | M | Median | 4.01 | 4.12 | 5.53 | 4.50 | 4.35 | 3.33 | 5.66 | 6.43 |
| Stdev | 3.86 | 2.05 | 2.94 | 1.78 | 1.55 | 2.48 | 5.33 | 2.32 |
| F | Median | 3.89 | 4.14 | 5.41 | 4.03 | 3.72 | 3.63 | 4.38 | 3.60 |
| Stdev | 1.66 | 4.44 | 2.42 | 4.23 | 2.64 | 0.36 | 1.77 | 5.76 |
| C | Median | 3.89 | 4.14 | 5.41 | 4.50 | 4.13 | 3.52 | 4.59 | 5.12 |
| Stdev | 2.88 | 3.47 | 2.60 | 3.12 | 2.10 | 1.72 | 3.98 | 4.34 |
| TMRTG | M | Median | 11.50 | 11.09 | 9.50 | 10.67 | 10.63 | 11.84 | 10.35 | 13.58 |
| Stdev | 2.96 | 3.09 | 6.53 | 2.66 | 4.96 | 7.72 | 3.75 | 9.18 |
| F | Median | 10.21 | 9.08 | 11.05 | 7.96 | 7.80 | 10.96 | 9.79 | 10.13 |
| Stdev | 2.05 | 2.45 | 3.30 | 3.18 | 2.46 | 2.04 | 3.79 | 1.89 |
| C | Median | 10.96 | 10.25 | 10.88 | 9.55 | 9.00 | 10.96 | 10.25 | 10.67 |
| Stdev | 2.44 | 2.74 | 4.95 | 2.93 | 4.37 | 5.64 | 3.61 | 6.83 |
| TTG | M | Median | 209.96 | 175.23 | 233.02 | 168.58 | 171.67 | 165.77 | 214.03 | 280.15 |
| Stdev | 79.36 | 70.60 | 114.25 | 93.34 | 34.36 | 23.17 | 204.27 | 63.05 |
| F | Median | 181.73 | 180.47 | 210.41 | 200.22 | 180.87 | 220.74 | 194.30 | 148.27 |
| Stdev | 44.60 | 68.81 | 28.95 | 108.67 | 114.84 | 45.87 | 86.00 | 144.87 |
| C | Median | 181.73 | 175.23 | 216.25 | 168.58 | 180.78 | 185.23 | 204.33 | 265.77 |
| Stdev | 63.15 | 66.58 | 79.59 | 97.20 | 83.97 | 40.01 | 153.58 | 117.63 |

Table S4. TEG values for thawed PPP samples without and with added constituents

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | C | EE1 | EE2 | DR | LE1 | LE2 | MX | NO |
| R | M | Median | 8.25 | 6.90 | 5.55 | 5.40 | 4.95 | 4.50 | 3.85 | 4.25 |
| Stdev | 2.34 | 1.64 | 1.96 | 1.26 | 1.84 | 1.97 | 2.26 | 2.03 |
| F | Median | 9.05 | 6.70 | 7.15 | 6.15 | 7.00 | 6.85 | 6.05 | 7.20 |
| Stdev | 1.42 | 1.02 | 0.88 | 1.20 | 2.61 | 2.39 | 1.74 | 2.61 |
| C | Median | 8.70 | 6.75 | 6.65 | 5.95 | 5.35 | 6.30 | 4.70 | 6.05 |
| Stdev | 1.85 | 1.32 | 1.54 | 1.29 | 2.36 | 2.44 | 2.08 | 2.53 |
| K | M | Median | 5.10 | 4.90 | 4.35 | 3.55 | 3.40 | 3.15 | 3.45 | 3.30 |
| Stdev | 2.19 | 1.23 | 0.76 | 0.94 | 0.91 | 0.44 | 1.24 | 0.82 |
| F | Median | 4.30 | 3.15 | 3.70 | 3.35 | 3.40 | 3.45 | 4.25 | 3.65 |
| Stdev | 2.20 | 1.09 | 2.87 | 0.80 | 1.67 | 1.92 | 1.47 | 1.37 |
| C | Median | 4.60 | 3.65 | 4.20 | 3.45 | 3.40 | 3.30 | 3.65 | 3.55 |
| Stdev | 2.18 | 1.47 | 2.00 | 0.87 | 1.29 | 1.40 | 1.32 | 1.12 |
| α | M | Median | 49.00 | 51.20 | 51.90 | 57.55 | 56.25 | 58.80 | 58.10 | 59.50 |
| Stdev | 4.40 | 4.06 | 6.62 | 10.83 | 5.06 | 3.29 | 9.52 | 6.74 |
| F | Median | 48.75 | 59.45 | 58.60 | 59.85 | 56.85 | 55.65 | 54.90 | 54.95 |
| Stdev | 10.08 | 7.41 | 8.28 | 6.82 | 8.98 | 9.27 | 8.10 | 8.40 |
| C | Median | 48.75 | 55.65 | 56.05 | 57.95 | 56.25 | 56.40 | 55.45 | 56.40 |
| Stdev | 7.67 | 8.12 | 8.13 | 9.21 | 6.98 | 6.70 | 8.43 | 7.43 |
| MA | M | Median | 50.15 | 47.15 | 52.50 | 48.95 | 51.70 | 53.55 | 54.20 | 52.30 |
| Stdev | 7.91 | 6.55 | 5.23 | 6.84 | 8.56 | 3.30 | 7.97 | 3.09 |
| F | Median | 52.20 | 53.15 | 46.30 | 54.80 | 49.65 | 48.70 | 51.20 | 52.15 |
| Stdev | 7.11 | 7.91 | 17.13 | 6.73 | 10.03 | 6.43 | 9.55 | 7.94 |
| C | Median | 51.35 | 51.45 | 51.40 | 51.00 | 50.90 | 53.00 | 52.50 | 52.30 |
| Stdev | 7.18 | 7.76 | 12.66 | 7.08 | 8.95 | 5.28 | 8.62 | 5.76 |
| MRTG | M | Median | 2.48 | 2.78 | 3.38 | 3.56 | 3.72 | 4.65 | 3.92 | 3.75 |
| Stdev | 0.88 | 0.74 | 0.30 | 1.58 | 1.00 | 1.03 | 1.30 | 1.11 |
| F | Median | 3.07 | 3.56 | 3.23 | 3.74 | 3.53 | 3.58 | 3.30 | 3.41 |
| Stdev | 1.81 | 2.63 | 2.89 | 1.29 | 3.10 | 1.90 | 1.94 | 2.29 |
| C | Median | 2.75 | 3.38 | 3.38 | 3.61 | 3.60 | 4.04 | 3.49 | 3.58 |
| Stdev | 1.42 | 2.08 | 2.02 | 1.38 | 2.26 | 1.56 | 1.59 | 1.72 |
| TMRTG | M | Median | 13.34 | 13.05 | 11.25 | 8.96 | 7.54 | 7.59 | 7.29 | 7.33 |
| Stdev | 4.23 | 2.95 | 1.49 | 2.68 | 2.55 | 2.05 | 3.13 | 3.13 |
| F | Median | 12.79 | 9.21 | 9.67 | 10.25 | 10.38 | 11.33 | 9.79 | 11.17 |
| Stdev | 2.76 | 1.40 | 1.67 | 1.87 | 3.69 | 4.30 | 2.73 | 3.66 |
| C | Median | 13.29 | 11.38 | 10.29 | 9.63 | 8.29 | 8.09 | 9.00 | 9.96 |
| Stdev | 3.47 | 2.74 | 1.69 | 2.25 | 3.31 | 3.72 | 2.93 | 3.65 |
| TTG | M | Median | 501.60 | 447.43 | 552.83 | 480.77 | 552.51 | 577.51 | 593.14 | 550.30 |
| Stdev | 167.48 | 140.31 | 140.08 | 145.27 | 182.22 | 81.33 | 174.77 | 76.51 |
| F | Median | 552.03 | 565.99 | 417.41 | 604.54 | 527.01 | 556.36 | 529.72 | 555.28 |
| Stdev | 142.03 | 276.29 | 394.81 | 199.54 | 318.51 | 117.40 | 265.72 | 199.79 |
| C | Median | 528.08 | 531.74 | 528.75 | 522.08 | 536.64 | 567.56 | 552.61 | 550.30 |
| Stdev | 148.36 | 227.79 | 284.89 | 179.77 | 257.44 | 98.47 | 223.59 | 145.73 |