File S1. GEE model.

[1]]

Call:

geeglm(formula = `25OHD` ~ Time + Supplemented_dose +

BMI, data = ., id = Lp)

Coefficients:

	Estimate	Std.err	Wald	Pr(>|W|)	
(Intercept)	15.414	3.541	18.95	1.3e-05	***
Time	6.635	1.788	13.78	0.00021	***
Supplemented_dose	3.030	1.783	2.89	0.08915	.
BMI	0.031	0.103	0.09	0.76279	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation structure = independence

Estimated Scale Parameters:

	Estimate	Std.err
(Intercept)	83.1	12.6

Number of clusters: 104 Maximum cluster size: 1

[[2]]

Call:

geeglm(formula = ALCAM ~ Time + Supplemented_dose + BMI, data = .,

id = Lp)

Coefficients:

	Estimate	Std.err	Wald	Pr(>|W|)	
(Intercept)	2.77463	0.74744	13.78	0.00021	***
Time	-0.22662	0.30850	0.54	0.46260	
Supplemented_dose	-0.08786	0.30970	0.08	0.77666	
BMI	0.00388	0.01825	0.05	0.83168	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation structure = independence

Estimated Scale Parameters:

	Estimate	Std.err
(Intercept)	2.47	0.546

Number of clusters: 104 Maximum cluster size: 1

[[3]]

Call:

geeglm(formula = CXCL16 ~ Time + Supplemented_dose + BMI, data = .,
id = Lp)

Coefficients:

	Estimate	Std.err	Wald	Pr(>|W|)	
(Intercept)	0.00340	0.21229	0.00	0.987	
Time	0.11171	0.08458	1.74	0.187	
Supplemented_dose	0.01637	0.08505	0.04	0.847	
BMI	0.00837	0.00472	3.14	0.076	.

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation structure = independence

Estimated Scale Parameters:

Estimate Std.err

(Intercept) 0.186 0.049

Number of clusters: 104 Maximum cluster size: 1

[[4]]

Call:

geeglm(formula = PTX_3 ~ Time + Supplemented_dose + BMI, data = .,

id = Lp)

Coefficients:

Estimate Std.err Wald Pr(>|W|)

(Intercept) 2448.5 385.3 40.39 2.1e-10 ***

Time 271.9 139.0 3.83 0.050 .

Supplemented_dose 14.9 141.0 0.01 0.916

BMI -19.0 10.9 3.02 0.082 .

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation structure = independence

Estimated Scale Parameters:

Estimate Std.err

(Intercept) 502143 60314

Number of clusters: 104 Maximum cluster size: 1

[[5]]

Call:

geeglm(formula = IL_1RA ~ Time + Supplemented_dose + BMI, data = .,

id = Lp)

Coefficients:

	Estimate	Std.err	Wald	Pr(>|W|)	
(Intercept)	1145.3	556.1	4.24	0.039	*
Time	-45.6	184.9	0.06	0.805	
Supplemented_dose	42.1	181.7	0.05	0.817	
BMI	12.4	17.5	0.50	0.479	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Correlation structure = independence

Estimated Scale Parameters:

	Estimate	Std.err
(Intercept)	888867	198728

Number of clusters: 104 Maximum cluster size: 1

[[6]]

Call:

geeglm(formula = OPG ~ Time + Supplemented_dose + BMI, data = .,

id = Lp)

Coefficients:

	Estimate	Std.err	Wald	Pr(>|W|)	
(Intercept)	3.4967	0.7406	22.29	2.3e-06	***
Time	1.2036	0.2796	18.53	1.7e-05	***
Supplemented_dose	0.4184	0.2815	2.21	0.14	

BMI 0.0266 0.0205 1.69 0.19

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation structure = independence

Estimated Scale Parameters:

Estimate Std.err

(Intercept) 2.03 0.379

Number of clusters: 104 Maximum cluster size: 1

[[7]]

Call:

geeglm(formula = `25OHD` ~ Time + Supplemented_dose +

Age_years, data = ., id = Lp)

Coefficients:

Estimate Std.err Wald Pr(>|W|)

(Intercept) 11.7035 4.6411 6.36 0.01168 *

Time 6.6119 1.7872 13.69 0.00022 ***

Supplemented_dose 3.0862 1.7644 3.06 0.08026 .

Age_years 0.0950 0.0851 1.25 0.26383

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation structure = independence

Estimated Scale Parameters:

Estimate Std.err

(Intercept) 81.4 12.8

Number of clusters: 102 Maximum cluster size: 1

[[8]]

Call:

geeglm(formula = ALCAM ~ Time + Supplemented_dose + Age_years,

  data = ., id = Lp)

Coefficients:

	Estimate	Std.err	Wald	Pr(>|W|)	
(Intercept)	1.6844	0.6758	6.21	0.013	*
Time	-0.2757	0.3056	0.81	0.367	
Supplemented_dose	-0.1818	0.3256	0.31	0.577	
Age_years	0.0287	0.0167	2.96	0.085	.

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation structure = independence

Estimated Scale Parameters:

	Estimate	Std.err
(Intercept)	2.38	0.476

Number of clusters: 102 Maximum cluster size: 1

[[9]]

Call:

geeglm(formula = CXCL16 ~ Time + Supplemented_dose + Age_years,

  data = ., id = Lp)

Coefficients:

```
                Estimate  Std.err Wald Pr(>|W|)
(Intercept)              0.000109 0.247074 0.00     1.00
Time                     0.123824 0.084037 2.17     0.14
Supplemented_dose        0.035615 0.080134 0.20     0.66
Age_years                0.003884 0.003294 1.39     0.24

Correlation structure = independence
Estimated Scale Parameters:

          Estimate Std.err
(Intercept)     0.18  0.0492
Number of clusters:   102  Maximum cluster size: 1

[[10]]

Call:
geeglm(formula = PTX_3 ~ Time + Supplemented_dose + Age_years,
   data = ., id = Lp)

 Coefficients:
                Estimate Std.err  Wald Pr(>|W|)
(Intercept)              2262.54  357.71 40.01  2.5e-10 ***
Time                     291.86  140.45  4.32    0.038 *
Supplemented_dose        72.32  157.09  0.21    0.645
Age_years                -8.38    6.52  1.65    0.199
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation structure = independence
Estimated Scale Parameters:
```

```
        Estimate Std.err
(Intercept)   502992   68416
Number of clusters:   102  Maximum cluster size: 1

[[11]]

Call:
geeglm(formula = IL_1RA ~ Time + Supplemented_dose + Age_years,
   data = ., id = Lp)

 Coefficients:
                 Estimate Std.err  Wald Pr(>|W|)
(Intercept)                2467.03  426.30 33.49  7.2e-09 ***
Time                       -44.04  176.23  0.06  0.80266
Supplemented_dose    238.82  183.31  1.70  0.19264
Age_years                  -25.34    6.88 13.57  0.00023 ***
---
Signif. codes:  0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation structure = independence
Estimated Scale Parameters:

        Estimate Std.err
(Intercept)   791979  186132
Number of clusters:   102  Maximum cluster size: 1

[[12]]

Call:
geeglm(formula = OPG ~ Time + Supplemented_dose + Age_years,
   data = ., id = Lp)
```

Coefficients:

	Estimate	Std.err	Wald	Pr(>|W|)	
(Intercept)	2.3709	0.5827	16.56	4.7e-05	***
Time	1.2150	0.2545	22.80	1.8e-06	***
Supplemented_dose	0.4340	0.2508	2.99	0.08358	.
Age_years	0.0377	0.0098	14.83	0.00012	***

Signif. codes: 0 ‘***’ 0.001 ‘**’ 0.01 ‘*’ 0.05 ‘.’ 0.1 ‘ ’ 1

Correlation structure = independence

Estimated Scale Parameters:

	Estimate	Std.err
(Intercept)	1.65	0.33

Number of clusters: 102 Maximum cluster size: 1