Table of Contents

Table S1. Descriptive level of biomarkers pre-post by day. 2

Table S2. Descriptive level of biomarkers pre-post by sex. 2

Table S3. Descriptive level of biomarkers pre-post by group 3

VEGF-A results with covariates 4

Table S4. VEGF-A results with BSA as covariate. 4

Table S5. VEGF-A with % body fat as a covariate 5

Table S6. VEGF-A with VO_2 as a covariate 6

VEGF-C 7

Table S7. VEGF-C with VO_2 as a covariate 7

Table S8. VEGF-C with BSA as a covariate 8

Table S9. VEGF-C with % Body fat as covariate 9

VEGF-D 10

Table S10. VEGF-D with BSA as a covariate 10

Table S11. VEGF-D with VO_2 as a covariate 11

bFGF 13

Table S12. bFGF with VO_2 as a covariate 13

Table S13. bFGF with BSA as a covariate 14

sFlt-1 15

TableS14. sFlt-1 with percentage of body fat as a covariate 15

Table S15. sFlt-1 with VO_2 max as a covariate 16

Table S16. sFlt-1 with BSA as a covariate 17

PIGF 19

Table S17. PIGF with BSA as a covariate 19

TIE-2 19

Table S18. Tie-2 with BSA as a covariate 19

Table S19. P-value correction with Holm Bonferroni for VEGF-A post-hoc analysis 21

Table S20. P-value correction with Holm-Bonferroni for VEGF-C post-hoc analysis 21

Table S1. Descriptive level of biomarkers pre-post by day. Data presented as mean ± SD.

	Day 1		Day 7	
	Pre	**Post**	**Pre**	**Post**
VEGF-A	90 ± 7.4	100.4 ± 9.3	97 ± 9.5	99.7 ± 9.9
VEGF-C	173 ± 15.2	182.9 ± 15	173.5 ± 17.4	181.6 ± 17.7
VEGF-D	894.6 ± 55.7	860.5 ± 51.9	901 ± 52.2	897.5 ± 53.1
bFGF	22.9 ± 2.1	26.2 ± 2.2	22.5 ± 2.4	25.5 ± 2.4
sFlt-1	78.9 ± 2.6	101.2 ± 3.5	76.3 ± 2.6	93.9 ± 3.3
PlGF	6.8 ± 0.2	6.8 ± 0.3	7 ± 0.3	6.9 ± 0.3
Tie-2	5256.4 ± 284	5138.5 ± 277.3	5160 ± 272.7	5177.6 ± 283.6

Values are mean ± SE (pg/mL).

Table S2. Descriptive level of biomarkers pre-post by sex. Data presented as mean ± SD

	Female		Male	
	Pre	**Post**	**Pre**	**Post**
VEGF-A	95.6 ± 10.9	110.3 ± 14	91.4 ± 12	89.8 ± 10.5
VEGF-C	192.2 ± 23.8	209 ± 25.1	154.3 ± 21.4	155.5 ± 19.4
VEGF-D	991.4 ± 78.7	961.4 ± 76.7	804.2 ± 66.9	796.6 ± 67.4
bFGF	21.1 ± 2.6	24.4 ± 2.9	24.3 ± 3.2	27.3 ± 3.3
sFlt-1	75.7 ± 3.2	94.3 ± 4	79.5 ± 3.9	100.8 ± 5.2
PlGF	6.6 ± 0.3	6.6 ± 0.4	7.1 ± 0.4	7.2 ± 0.4
Tie-2	4992.2 ± 366.4	4944.7 ± 362.3	5424.1 ± 417.2	5371.4 ± 422.6

Values are mean ± SE (pg/mL), averaged across Day 1 and Day 7.

Table S3. Descriptive level of biomarkers pre-post by group. Data presented as mean±SD

	Sustained		Periodic	
	Pre	**Post**	**Pre**	**Post**
VEGF-A	94.3 ± 10.9	100.5 ± 12.1	92.7 ± 12	99.6 ± 12.8
VEGF-C	173.3 ± 23.6	185.5 ± 23.6	173.2 ± 22.2	179 ± 22.2
VEGF-D	936.9 ± 73.3	913 ± 72.5	858.7 ± 76.1	845 ± 74.5
bFGF	23.2 ± 2.8	26.2 ± 3	22.2 ± 3.1	25.5 ± 3.2
sFlt-1	78.8 ± 3.8	100.2 ± 5	76.4 ± 3.3	94.8 ± 4.2
PlGF	6.8 ± 0.4	6.7 ± 0.4	7 ± 0.3	7 ± 0.3
Tie-2	5472.2 ± 439	5403.3 ± 454.1	4944.1 ± 337.6	4912.8 ± 320.4

Values are mean ± SE (pg/mL), averaged across Day 1 and Day 7.

VEGF-A results with covariates

Table S4. VEGF-A results with BSA as covariate.

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**7135.36**	1	7135.36	3.1638	0.081	0.054
Day ✻ Exposure	**6177.12**	1	6177.12	2.7389	0.104	0.047
Day ✻ Sex	**4610.04**	1	4610.04	2.0441	0.158	0.036
Day ✻ BSA	**6837.36**	1	6837.36	3.0316	0.087	0.052
Day ✻ Exposure ✻ Sex	**5004.05**	1	5004.05	2.2188	0.142	0.039
Residual	**124043.48**	55	2255.34			
PP	**119.86**	1	119.86	0.1652	0.686	0.003
PP ✻ Exposure	**13.16**	1	13.16	0.0181	0.893	0.000
PP ✻ Sex	**3143.32**	1	3143.32	4.3317	0.042	0.073
PP ✻ BSA	**232.10**	1	232.10	0.3199	0.574	0.006
PP ✻ Exposure ✻ Sex	**79.63**	1	79.63	0.1097	0.742	0.002
Residual	**39910.83**	55	725.65			
Day ✻ PP	**11.93**	1	11.93	0.0289	0.866	0.001
Day ✻ PP ✻ Exposure	**4.77**	1	4.77	0.0116	0.915	0.000
Day ✻ PP ✻ Sex	**103.90**	1	103.90	0.2520	0.618	0.005
Day ✻ PP ✻ BSA	**35.73**	1	35.73	0.0867	0.770	0.002
Day ✻ PP ✻ Exposure ✻ Sex	**669.69**	1	669.69	1.6242	0.208	0.029
Residual	**22677.79**	55	412.32			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	192.3	1	192.3	0.01140	0.915	0.000
Sex	25.0	1	25.0	0.00148	0.969	0.000
BSA	11413.1	1	11413.1	0.67637	0.414	0.012

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure ✻ Sex	7596.3	1	7596.3	0.45018	0.505	0.008
Residual	928073.2	55	16874.1			

Note. Type 3 Sums of Squares

Table S5. VEGF-A with % body fat as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**5509.40**	1	5509.40	2.4052	0.127	0.042
Day ✻ Exposure	**5845.90**	1	5845.90	2.5521	0.116	0.044
Day ✻ Sex	**641.68**	1	641.68	0.2801	0.599	0.005
Day ✻ %BF	**4898.92**	1	4898.92	2.1387	0.149	0.037
Day ✻ Exposure ✻ Sex	**6027.36**	1	6027.36	2.6314	0.110	0.046
Residual	**125981.93**	55	2290.58			
PP	**19.94**	1	19.94	0.0274	0.869	0.000
PP ✻ Exposure	**10.38**	1	10.38	0.0143	0.905	0.000
PP ✻ Sex	**2154.18**	1	2154.18	2.9629	0.091	0.051
PP ✻ %BF	**155.11**	1	155.11	0.2133	0.646	0.004
PP ✻ Exposure ✻ Sex	**103.55**	1	103.55	0.1424	0.707	0.003
Residual	**39987.82**	55	727.05			
Day ✻ PP	**51.98**	1	51.98	0.1259	0.724	0.002
Day ✻ PP ✻ Exposure	**5.66**	1	5.66	0.0137	0.907	0.000
Day ✻ PP ✻ Sex	**32.46**	1	32.46	0.0786	0.780	0.001
Day ✻ PP ✻ %BF	**6.45**	1	6.45	0.0156	0.901	0.000
Day ✻ PP ✻ Exposure ✻ Sex	**691.99**	1	691.99	1.6761	0.201	0.030
Residual	**22707.08**	55	412.86			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	91.5	1	91.5	0.00536	0.942	0.000
Sex	5194.5	1	5194.5	0.30418	0.584	0.006
%BF	245.7	1	245.7	0.01439	0.905	0.000
Exposure ✻ Sex	8530.5	1	8530.5	0.49953	0.483	0.009
Residual	939240.6	55	17077.1			

Note. Type 3 Sums of Squares

Table S6. VEGF-A with VO_2 as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**667.62**	1	667.62	0.28253	0.597	0.005
Day ✻ Exposure	**5607.50**	1	5607.50	2.37301	0.129	0.041
Day ✻ Sex	**17.17**	1	17.17	0.00727	0.932	0.000
Day ✻ VO2 max	**914.08**	1	914.08	0.38683	0.537	0.007
Day ✻ Exposure ✻ Sex	**5946.02**	1	5946.02	2.51627	0.118	0.044
Residual	**129966.76**	55	2363.03			
PP	**435.95**	1	435.95	0.59978	0.442	0.011
PP ✻ Exposure	**7.82**	1	7.82	0.01075	0.918	0.000
PP ✻ Sex	**2100.85**	1	2100.85	2.89036	0.095	0.050
PP ✻ VO2 max	**166.18**	1	166.18	0.22863	0.634	0.004
PP ✻ Exposure ✻ Sex	**112.27**	1	112.27	0.15447	0.696	0.003
Residual	**39976.75**	55	726.85			
Day ✻ PP	**44.50**	1	44.50	0.10841	0.743	0.002
Day ✻ PP ✻ Exposure	**4.79**	1	4.79	0.01166	0.914	0.000
Day ✻ PP ✻ Sex	**179.25**	1	179.25	0.43665	0.512	0.008
Day ✻ PP ✻ VO2 max	**135.68**	1	135.68	0.33053	0.568	0.006
Day ✻ PP ✻ Exposure ✻ Sex	**644.44**	1	644.44	1.56986	0.216	0.028
Residual	**22577.84**	55	410.51			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	118	1	118	0.00693	0.934	0.000
Sex	2478	1	2478	0.14555	0.704	0.003
VO2 max	3094	1	3094	0.18172	0.672	0.003
Exposure ✻ Sex	7920	1	7920	0.46517	0.498	0.008
Residual	936393	55	17025			

Note. Type 3 Sums of Squares

VEGF-C

Table S7. VEGF-C with VO_2 as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**1132.2**	1	1132.2	0.5753	0.451	0.010
Day ✻ Exposure	**2793.7**	1	2793.7	1.4194	0.239	0.025
Day ✻ Sex	**28.7**	1	28.7	0.0146	0.904	0.000
Day ✻ VO2 max	**1128.8**	1	1128.8	0.5735	0.452	0.010
Day ✻ Exposure ✻ Sex	**890.5**	1	890.5	0.4524	0.504	0.008
Residual	**108252.1**	55	1968.2			
PP	**1159.4**	1	1159.4	1.7041	0.197	0.030
PP ✻ Exposure	**612.4**	1	612.4	0.9001	0.347	0.016
PP ✻ Sex	**1440.6**	1	1440.6	2.1174	0.151	0.037
PP ✻ VO2 max	**531.7**	1	531.7	0.7816	0.381	0.014
PP ✻ Exposure ✻ Sex	**315.7**	1	315.7	0.4640	0.499	0.008
Residual	**37419.8**	55	680.4			
Day ✻ PP	**2112.0**	1	2112.0	5.1054	0.028	0.085
Day ✻ PP ✻ Exposure	**12.9**	1	12.9	0.0311	0.861	0.001
Day ✻ PP ✻ Sex	**1393.1**	1	1393.1	3.3678	0.072	0.058

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day ✻ PP ✻ VO2 max	**2058.7**	1	2058.7	4.9766	0.030	0.083
Day ✻ PP ✻ Exposure ✻ Sex	**848.6**	1	848.6	2.0513	0.158	0.036
Residual	**22751.8**	55	413.7			

Note. Type 3 Sums of Squares

Table S8. VEGF-C with BSA as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**107.36**	1	107.36	0.05404	0.817	0.001
Day ✻ Exposure	**2903.79**	1	2903.79	1.46163	0.232	0.026
Day ✻ Sex	**344.11**	1	344.11	0.17321	0.679	0.003
Day ✻ BSA	**113.53**	1	113.53	0.05715	0.812	0.001
Day ✻ Exposure ✻ Sex	**730.54**	1	730.54	0.36772	0.547	0.007
Residual	**109267.37**	55	1986.68			
PP	**31.39**	1	31.39	0.04565	0.832	0.001
PP ✻ Exposure	**568.57**	1	568.57	0.82687	0.367	0.015
PP ✻ Sex	**2649.65**	1	2649.65	3.85335	0.055	0.065
PP ✻ BSA	**132.35**	1	132.35	0.19247	0.663	0.003
PP ✻ Exposure ✻ Sex	**243.76**	1	243.76	0.35450	0.554	0.006
Residual	**37819.23**	55	687.62			
Day ✻ PP	**1804.78**	1	1804.78	4.32704	0.042	0.073
Day ✻ PP ✻ Exposure	**1.10**	1	1.10	0.00263	0.959	0.000
Day ✻ PP ✻ Sex	**366.00**	1	366.00	0.87750	0.353	0.016
Day ✻ PP ✻ BSA	**1870.37**	1	1870.37	4.48429	0.039	0.075
Day ✻ PP ✻ Exposure ✻ Sex	**565.89**	1	565.89	1.35674	0.249	0.024
Residual	**22940.15**	55	417.09			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	1049	1	1049	0.0169	0.897	0.000
Sex	18081	1	18081	0.2909	0.592	0.005
BSA	30582	1	30582	0.4920	0.486	0.009
Exposure ✻ Sex	39087	1	39087	0.6288	0.431	0.011
Residual	3.42e+6	55	62165			

Note. Type 3 Sums of Squares

Table S9. VEGF-C with % Body fat as covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**5509.40**	1	5509.40	2.4052	0.127	0.042
Day ✻ Exposure	**5845.90**	1	5845.90	2.5521	0.116	0.044
Day ✻ Sex	**641.68**	1	641.68	0.2801	0.599	0.005
Day ✻ %BF	**4898.92**	1	4898.92	2.1387	0.149	0.037
Day ✻ Exposure ✻ Sex	**6027.36**	1	6027.36	2.6314	0.110	0.046
Residual	**125981.93**	55	2290.58			
PP	**19.94**	1	19.94	0.0274	0.869	0.000
PP ✻ Exposure	**10.38**	1	10.38	0.0143	0.905	0.000
PP ✻ Sex	**2154.18**	1	2154.18	2.9629	0.091	0.051
PP ✻ %BF	**155.11**	1	155.11	0.2133	0.646	0.004
PP ✻ Exposure ✻ Sex	**103.55**	1	103.55	0.1424	0.707	0.003
Residual	**39987.82**	55	727.05			
Day ✻ PP	**51.98**	1	51.98	0.1259	0.724	0.002
Day ✻ PP ✻ Exposure	**5.66**	1	5.66	0.0137	0.907	0.000
Day ✻ PP ✻ Sex	**32.46**	1	32.46	0.0786	0.780	0.001
Day ✻ PP ✻ %BF	**6.45**	1	6.45	0.0156	0.901	0.000
Day ✻ PP ✻ Exposure ✻ Sex	**691.99**	1	691.99	1.6761	0.201	0.030
Residual	**22707.08**	55	412.86			

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	91.5	1	91.5	0.00536	0.942	0.000
Sex	5194.5	1	5194.5	0.30418	0.584	0.006
%BF	245.7	1	245.7	0.01439	0.905	0.000
Exposure ✻ Sex	8530.5	1	8530.5	0.49953	0.483	0.009
Residual	939240.6	55	17077.1			

Note. Type 3 Sums of Squares

VEGF-D

Table S10. VEGF-D with BSA as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**1619.2**	1	1619.2	0.06727	0.796	0.001
Day ✻ Exposure	**95.1**	1	95.1	0.00395	0.950	0.000
Day ✻ Sex	**1475.2**	1	1475.2	0.06128	0.805	0.001
Day ✻ BSA	**687.0**	1	687.0	0.02854	0.866	0.001
Day ✻ Exposure ✻ Sex	**16062.5**	1	16062.5	0.66727	0.418	0.012
Residual	**1.32e+6**	55	24072.2			
PP	**394.3**	1	394.3	0.13664	0.713	0.002
PP ✻ Exposure	**1445.7**	1	1445.7	0.50098	0.482	0.009
PP ✻ Sex	**7188.2**	1	7188.2	2.49085	0.120	0.043
PP ✻ BSA	**1037.8**	1	1037.8	0.35960	0.551	0.006

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
PP ✻ Exposure ✻ Sex	**6928.7**	1	6928.7	2.40092	0.127	0.042
Residual	**158721.7**	55	2885.8			
Day ✻ PP	**24425.4**	1	24425.4	5.45919	0.023	0.090
Day ✻ PP ✻ Exposure	**731.0**	1	731.0	0.16339	0.688	0.003
Day ✻ PP ✻ Sex	**3459.5**	1	3459.5	0.77321	0.383	0.014
Day ✻ PP ✻ BSA	**21570.6**	1	21570.6	4.82111	0.032	0.081
Day ✻ PP ✻ Exposure ✻ Sex	**15.0**	1	15.0	0.00335	0.954	0.000
Residual	**246080.3**	55	4474.2			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	399542	1	399542	0.66173	0.419	0.012
Sex	45059	1	45059	0.07463	0.786	0.001
BSA	2.98e+6	1	2.98e+6	4.93921	0.030	0.082
Exposure ✻ Sex	1001	1	1001	0.00166	0.968	0.000
Residual	3.32e+7	55	603784			

Note. Type 3 Sums of Squares

Table S11. VEGF-D with VO_2 as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**361.65**	1	361.65	0.01502	0.903	0.000
Day ✻ Exposure	**73.79**	1	73.79	0.00306	0.956	0.000
Day ✻ Sex	**360.94**	1	360.94	0.01499	0.903	0.000
Day ✻ VO2 max	**68.96**	1	68.96	0.00286	0.958	0.000
Day ✻ Exposure ✻ Sex	**16532.77**	1	16532.77	0.68648	0.411	0.012

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Residual	**1.32e+6**	55	24083.39			
PP	**2073.35**	1	2073.35	0.71600	0.401	0.013
PP ✻ Exposure	**1576.82**	1	1576.82	0.54453	0.464	0.010
PP ✻ Sex	**3652.79**	1	3652.79	1.26144	0.266	0.022
PP ✻ VO2 max	**494.26**	1	494.26	0.17069	0.681	0.003
PP ✻ Exposure ✻ Sex	**6392.54**	1	6392.54	2.20757	0.143	0.039
Residual	**159265.20**	55	2895.73			
Day ✻ PP	**2522.48**	1	2522.48	0.52028	0.474	0.009
Day ✻ PP ✻ Exposure	**485.67**	1	485.67	0.10017	0.753	0.002
Day ✻ PP ✻ Sex	**1064.97**	1	1064.97	0.21966	0.641	0.004
Day ✻ PP ✻ VO2 max	**991.78**	1	991.78	0.20456	0.653	0.004
Day ✻ PP ✻ Exposure ✻ Sex	**3.24**	1	3.24	6.68e-4	0.979	0.000
Residual	**266659.03**	55	4848.35			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	326176	1	326176	0.49655	0.484	0.009
Sex	1.01e+6	1	1.01e+6	1.54331	0.219	0.027
VO2 max	61813	1	61813	0.09410	0.760	0.002
Exposure ✻ Sex	1872	1	1872	0.00285	0.958	0.000
Residual	3.61e+7	55	656882			

Note. Type 3 Sums of Squares

bFGF

Table S12. bFGF with VO_2 as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**80.333**	1	80.333	0.68767	0.411	0.012
Day ✻ Exposure	**170.926**	1	170.926	1.46318	0.232	0.026
Day ✻ Sex	**13.414**	1	13.414	0.11482	0.736	0.002
Day ✻ VO2 MAX	**70.314**	1	70.314	0.60191	0.441	0.011
Day ✻ Exposure ✻ Sex	**36.259**	1	36.259	0.31039	0.580	0.006
Residual	**6425.009**	55	116.818			
PP	**264.971**	1	264.971	5.91319	0.018	0.097
PP ✻ Exposure	**0.333**	1	0.333	0.00742	0.932	0.000
PP ✻ Sex	**34.833**	1	34.833	0.77736	0.382	0.014
PP ✻ VO2 MAX	**156.521**	1	156.521	3.49298	0.067	0.060
PP ✻ Exposure ✻ Sex	**33.724**	1	33.724	0.75260	0.389	0.013
Residual	**2464.557**	55	44.810			
Day ✻ PP	**27.236**	1	27.236	0.67965	0.413	0.012
Day ✻ PP ✻ Exposure	**145.047**	1	145.047	3.61947	0.062	0.062
Day ✻ PP ✻ Sex	**15.748**	1	15.748	0.39298	0.533	0.007
Day ✻ PP ✻ VO2 MAX	**25.294**	1	25.294	0.63118	0.430	0.011
Day ✻ PP ✻ Exposure ✻ Sex	**0.981**	1	0.981	0.02447	0.876	0.000
Residual	**2204.074**	55	40.074			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	49.5	1	49.5	0.0460	0.831	0.001
Sex	1100.4	1	1100.4	1.0231	0.316	0.018
VO2 MAX	562.9	1	562.9	0.5234	0.472	0.009

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure ✻ Sex	1836.4	1	1836.4	1.7074	0.197	0.030
Residual	59154.2	55	1075.5			

Note. Type 3 Sums of Squares

Table S13. bFGF with BSA as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**22.112**	1	22.112	0.18799	0.666	0.003
Day ✻ Exposure	**180.199**	1	180.199	1.53194	0.221	0.027
Day ✻ Sex	**112.534**	1	112.534	0.95669	0.332	0.017
Day ✻ BSA	**25.778**	1	25.778	0.21915	0.642	0.004
Day ✻ Exposure ✻ Sex	**26.935**	1	26.935	0.22898	0.634	0.004
Residual	**6469.545**	55	117.628			
PP	**2.085**	1	2.085	0.04397	0.835	0.001
PP ✻ Exposure	**0.908**	1	0.908	0.01915	0.890	0.000
PP ✻ Sex	**10.354**	1	10.354	0.21828	0.642	0.004
PP ✻ BSA	**12.227**	1	12.227	0.25776	0.614	0.005
PP ✻ Exposure ✻ Sex	**46.845**	1	46.845	0.98760	0.325	0.018
Residual	**2608.851**	55	47.434			
Day ✻ PP	**22.801**	1	22.801	0.56871	0.454	0.010
Day ✻ PP ✻ Exposure	**138.082**	1	138.082	3.44406	0.069	0.059
Day ✻ PP ✻ Sex	**84.450**	1	84.450	2.10636	0.152	0.037
Day ✻ PP ✻ BSA	**24.257**	1	24.257	0.60502	0.440	0.011
Day ✻ PP ✻ Exposure ✻ Sex	**0.152**	1	0.152	0.00378	0.951	0.000
Residual	**2205.111**	55	40.093			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	66.1	1	66.1	0.0627	0.803	0.001
Sex	2082.0	1	2082.0	1.9724	0.166	0.035
BSA	1660.3	1	1660.3	1.5729	0.215	0.028
Exposure ✻ Sex	1791.9	1	1791.9	1.6975	0.198	0.030
Residual	58056.8	55	1055.6			

Note. Type 3 Sums of Squares

sFlt-1

TableS14. sFlt-1 with percentage of body fat as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**90.054**	1	90.054	0.60372	0.440	0.011
Day ✻ Exposure	**129.852**	1	129.852	0.87052	0.355	0.016
Day ✻ Sex	**4.513**	1	4.513	0.03025	0.863	0.001
Day ✻ %BF	**9.010**	1	9.010	0.06040	0.807	0.001
Day ✻ Exposure ✻ Sex	**61.006**	1	61.006	0.40898	0.525	0.007
Residual	**8204.126**	55	149.166			
PP	**2389.509**	1	2389.509	23.14412	<.001	0.296
PP ✻ Exposure	**136.043**	1	136.043	1.31768	0.256	0.023
PP ✻ Sex	**85.680**	1	85.680	0.82987	0.366	0.015
PP ✻ %BF	**0.749**	1	0.749	0.00725	0.932	0.000
PP ✻ Exposure ✻ Sex	**82.774**	1	82.774	0.80173	0.374	0.014
Residual	**5678.462**	55	103.245			
Day ✻ PP	**28.224**	1	28.224	1.07898	0.303	0.019
Day ✻ PP ✻ Exposure	**5.409**	1	5.409	0.20678	0.651	0.004
Day ✻ PP ✻ Sex	**62.111**	1	62.111	2.37447	0.129	0.041

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day ✻ PP ✻ %BF	**135.961**	1	135.961	5.19770	0.027	0.086
Day ✻ PP ✻ Exposure ✻ Sex	**19.475**	1	19.475	0.74452	0.392	0.013
Residual	**1438.683**	55	26.158			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	916.6	1	916.6	0.4534	0.504	0.008
Sex	1465.2	1	1465.2	0.7248	0.398	0.013
%BF	71.1	1	71.1	0.0352	0.852	0.001
Exposure ✻ Sex	1225.5	1	1225.5	0.6062	0.440	0.011
Residual	111182.8	55	2021.5			

Note. Type 3 Sums of Squares

Table S15. sFlt-1 with VO_2 max as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**368.45**	1	368.45	2.521	0.118	0.044
Day ✻ Exposure	**123.13**	1	123.13	0.842	0.363	0.015
Day ✻ Sex	**59.22**	1	59.22	0.405	0.527	0.007
Day ✻ VO2 MAX	**173.72**	1	173.72	1.188	0.280	0.021
Day ✻ Exposure ✻ Sex	**49.16**	1	49.16	0.336	0.564	0.006
Residual	**8039.42**	55	146.17			
PP	**1656.34**	1	1656.34	16.795	<.001	0.234
PP ✻ Exposure	**143.64**	1	143.64	1.456	0.233	0.026
PP ✻ Sex	**304.82**	1	304.82	3.091	0.084	0.053
PP ✻ VO2 MAX	**254.92**	1	254.92	2.585	0.114	0.045

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
PP ✻ Exposure ✻ Sex	**64.54**	1	64.54	0.654	0.422	0.012
Residual	**5424.29**	55	98.62			
Day ✻ PP	**330.96**	1	330.96	13.649	<.001	0.199
Day ✻ PP ✻ Exposure	**3.46**	1	3.46	0.143	0.707	0.003
Day ✻ PP ✻ Sex	**101.12**	1	101.12	4.170	0.046	0.070
Day ✻ PP ✻ VO2 MAX	**240.97**	1	240.97	9.938	0.003	0.153
Day ✻ PP ✻ Exposure ✻ Sex	**25.49**	1	25.49	1.051	0.310	0.019
Residual	**1333.67**	55	24.25			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	950	1	950	0.472	0.495	0.009
Sex	2101	1	2101	1.044	0.311	0.019
VO2 MAX	506	1	506	0.251	0.618	0.005
Exposure ✻ Sex	1309	1	1309	0.650	0.424	0.012
Residual	110748	55	2014			

Note. Type 3 Sums of Squares

Table S16. sFlt-1 with BSA as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**58.377**	1	58.377	0.39665	0.531	0.007
Day ✻ Exposure	**138.365**	1	138.365	0.94015	0.336	0.017
Day ✻ Sex	**50.526**	1	50.526	0.34331	0.560	0.006
Day ✻ BSA	**118.592**	1	118.592	0.80580	0.373	0.014
Day ✻ Exposure ✻ Sex	**72.041**	1	72.041	0.48950	0.487	0.009

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Residual	**8094.545**	55	147.174			
PP	**159.083**	1	159.083	1.54066	0.220	0.027
PP ✻ Exposure	**135.858**	1	135.858	1.31574	0.256	0.023
PP ✻ Sex	**53.302**	1	53.302	0.51621	0.476	0.009
PP ✻ BSA	**0.110**	1	0.110	0.00106	0.974	0.000
PP ✻ Exposure ✻ Sex	**83.512**	1	83.512	0.80878	0.372	0.014
Residual	**5679.101**	55	103.256			
Day ✻ PP	**181.764**	1	181.764	7.41144	0.009	0.119
Day ✻ PP ✻ Exposure	**7.486**	1	7.486	0.30524	0.583	0.006
Day ✻ PP ✻ Sex	**81.739**	1	81.739	3.33293	0.073	0.057
Day ✻ PP ✻ BSA	**225.780**	1	225.780	9.20621	0.004	0.143
Day ✻ PP ✻ Exposure ✻ Sex	**10.269**	1	10.269	0.41871	0.520	0.008
Residual	**1348.864**	55	24.525			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	1064	1	1064	0.543	0.464	0.010
Sex	4829	1	4829	2.463	0.122	0.043
BSA	3436	1	3436	1.753	0.191	0.031
Exposure ✻ Sex	1429	1	1429	0.729	0.397	0.013
Residual	107818	55	1960			

Note. Type 3 Sums of Squares

PIGF

Table S17. PIGF with BSA as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**0.02869**	1	0.02869	0.0294	0.865	0.001
Day ✻ Exposure	**2.50121**	1	2.50121	2.5626	0.115	0.045
Day ✻ Sex	**0.04315**	1	0.04315	0.0442	0.834	0.001
Day ✻ BSA	**0.07161**	1	0.07161	0.0734	0.788	0.001
Day ✻ Exposure ✻ Sex	**2.48596**	1	2.48596	2.5470	0.116	0.044
Residual	**53.68205**	55	0.97604			
PP	**0.23972**	1	0.23972	0.8495	0.361	0.015
PP ✻ Exposure	**0.05473**	1	0.05473	0.1939	0.661	0.004
PP ✻ Sex	**0.70148**	1	0.70148	2.4859	0.121	0.043
PP ✻ BSA	**0.24399**	1	0.24399	0.8647	0.356	0.015
PP ✻ Exposure ✻ Sex	**0.36146**	1	0.36146	1.2810	0.263	0.023
Residual	**15.51984**	55	0.28218			
Day ✻ PP	**0.08293**	1	0.08293	0.4018	0.529	0.007
Day ✻ PP ✻ Exposure	**0.15255**	1	0.15255	0.7391	0.394	0.013
Day ✻ PP ✻ Sex	**0.00725**	1	0.00725	0.0351	0.852	0.001
Day ✻ PP ✻ BSA	**0.08707**	1	0.08707	0.4219	0.519	0.008
Day ✻ PP ✻ Exposure ✻ Sex	**0.05375**	1	0.05375	0.2604	0.612	0.005
Residual	**11.35105**	55	0.20638			

Note. Type 3 Sums of Squares

TIE-2

Table S18. Tie-2 with BSA as a covariate

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p

Within Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Day	**27207.4**	1	27207.4	0.10001	0.753	0.002
Day ✻ Exposure	**17339.2**	1	17339.2	0.06374	0.802	0.001
Day ✻ Sex	**18760.5**	1	18760.5	0.06896	0.794	0.001
Day ✻ BSA	**21561.5**	1	21561.5	0.07926	0.779	0.001
Day ✻ Exposure ✻ Sex	**97156.6**	1	97156.6	0.35713	0.553	0.006
Residual	**1.50e+7**	55	272050.8			
PP	**148507.1**	1	148507.1	1.92015	0.171	0.034
PP ✻ Exposure	**16718.5**	1	16718.5	0.21617	0.644	0.004
PP ✻ Sex	**76113.4**	1	76113.4	0.98412	0.326	0.018
PP ✻ BSA	**175904.5**	1	175904.5	2.27440	0.137	0.040
PP ✻ Exposure ✻ Sex	**32287.2**	1	32287.2	0.41746	0.521	0.008
Residual	**4.25e+6**	55	77341.2			
Day ✻ PP	**80550.9**	1	80550.9	1.11094	0.296	0.020
Day ✻ PP ✻ Exposure	**264.4**	1	264.4	0.00365	0.952	0.000
Day ✻ PP ✻ Sex	**350.6**	1	350.6	0.00483	0.945	0.000
Day ✻ PP ✻ BSA	**57892.8**	1	57892.8	0.79844	0.375	0.014
Day ✻ PP ✻ Exposure ✻ Sex	**15.4**	1	15.4	2.13e-4	0.988	0.000
Residual	**3.99e+6**	55	72507.3			

Note. Type 3 Sums of Squares

Between Subjects Effects

	Sum of Squares	df	Mean Square	F	p	η^2_p
Exposure	1.79e+7	1	1.79e+7	0.987	0.325	0.018
Sex	5.81e+7	1	5.81e+7	3.203	0.079	0.055
BSA	5.69e+7	1	5.69e+7	3.137	0.082	0.054
Exposure ✻ Sex	2.11e+6	1	2.11e+6	0.116	0.735	0.002
Residual	9.98e+8	55	1.81e+7			

Note. Type 3 Sums of Squares

Table S19. P-value correction with Holm Bonferroni for VEGF-A post-hoc analysis

Post Hoc Comparisons - PP ✻ Sex

Comparison					Mean Difference	SE	df	t	p	p_{tukey}	p_{holm}
PP	**Sex**		**PP**	**Sex**							
Pre	**M**	**-**	**Pre**	**F**	-4.20	16.41	56.0	-0.256	0.799	0.994	1.000
		-	**Post**	**M**	1.63	4.89	56.0	0.334	0.740	0.987	1.000
		-	**Post**	**F**	-18.86	17.08	56.0	-1.104	0.274	0.688	1.000
	F	**-**	**Post**	**M**	5.83	17.08	56.0	0.342	0.734	0.986	1.000
		-	**Post**	**F**	-14.66	4.89	56.0	-2.999	0.004	0.020	0.024
Post	**M**	**-**	**Post**	**F**	-20.49	17.72	56.0	-1.157	0.252	0.656	1.000

Table S20. P-value correction with Holm-Bonferroni for VEGF-C post-hoc analysis

Post Hoc Comparisons - PP ✻ Sex

Comparison					Mean Difference	SE	df	t	p	p_{tukey}	p_{holm}
PP	**Sex**		**PP**	**Sex**							
Pre	**M**	**-**	**Pre**	**F**	-37.95	32.38	56.0	-1.172	0.246	0.647	0.738
		-	**Post**	**M**	-1.23	4.75	56.0	-0.259	0.796	0.994	0.796
		-	**Post**	**F**	-54.75	32.22	56.0	-1.699	0.095	0.334	0.474
	F	**-**	**Post**	**M**	36.72	32.22	56.0	1.140	0.259	0.667	0.738
		-	**Post**	**F**	-16.80	4.75	56.0	-3.535	<.001	0.004	0.005
Post	**M**	**-**	**Post**	**F**	-53.52	32.06	56.0	-1.670	0.101	0.349	0.474