Table S1. Socio-demographic characteristics of healthy controls by ethnicity.

Parameters	**Caucasians n = 88 (1)**	**Asians n = 42 (2)**	**Mixed n = 13 (3)**	***p*-Value**
Age, years,	34.2±6.13	36.2±5.4	33.0±6.2	$p_U = 0.66^{1-2}$
Mean±SD	35.0	38.0	34.0 (32.0;37.0)	$p_U = 0.75^{1-3}$
Median (LQ;UQ)	(30.0;39.0)	(32.0;40.0)		$p_U = 0.97^{2-3}$
Marital status, n/N (%)				
Single	17/88 (19.3%)	11/42 (26.1%)	3/13 (2.10%)	$p_{\chi 2}{}^{1.2.3}=0.62$
Married	49/88 (55.6%)	21/42 (50.0 %)	10/13 (76.9%)	$p_{\chi 2}{}^{1.2.3}=0.23$
Living with another	12/88 (13.6%)	3/42 (7.14%)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.26$
Separated	0/88 (0.00%)	0/42 (0.00%)	0/13 (0.00%)	
Divorced	8/88 (9.09%)	5/42 (11.9%)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.43$
Widowed	1/88 (1.14%)	1/42 (2.38%)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.78$
Would rather not say	1/88 (1.14%)	1/42 (2.38%)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.78$
Occupation, n/N (%)				
Legislators. senior officials. and managers	3/88 (3.45%)	1/42 (2.44%)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.75$
Professionals	35/88 (40.2%)	25/42 (60.9%)	5/13 (38.4%)	$p_{\chi 2}{}^{1.2.3}=0.06$ $p_{\chi 2}=0.02^{1-2}$ $p_{\chi 2Fisher}=0.57^{1-3}$ $p_{\chi 2Fisher}=0.13^{2-3}$
Technicians and associate professionals	16/88 (18.3%)	5/42 (12.2%)	5/13 (38.4%)	$p_{\chi 2}{}^{1.2.3}=0.10$
Office clerks	10/88 (11.4%)	6/42 (14.6%)	1/13 (7.6%)	$p_{\chi 2}{}^{1.2.3}=0.78$
Service workers. and shop and market sales	6/88 (6.90%)	3/42 (7.32%)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.60$
Skilled agricultural and fishery workers	2/88 (2.30%)	0/42 (0.00 %)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.52$
Craft and related trades workers	9/88 (10.3%)	1/42 (2.44%)	1/13 (7.69%)	$p_{\chi 2}{}^{1.2.3}=0.27$
Plant and machine operators and assemblers	2/ 88 (2.30%)	0/42 (0.00%)	0/13 (0.00%)	$p_{\chi 2}{}^{1.2.3}=0.72$

Elementary occupations	4/ 88 (4.60%)	0/42 (0.00%)	0/13 (0.00%)	$p_{\chi2}{}^{1.2.3}$=0.26
Armed forces	0/88 (0.00%)	0/42 (0.00%)	1/13 (7.69%)	
Missing data on occupation	1/88 (1.14%)	1/42 (2.44%)	0/13 (0.00%)	
Education, n/N(%)				
Doctoral degree	8/ 88 (8.24%)	3/42 (7.14 %)	5/13 (38.46%)	$p_{\chi2}{}^{1.2.3}$=0.003 $p_{\chi2Fisher}$=0.49$^{1-2}$ $p_{\chi2Fisher}$=0.01$^{1-3}$ $p_{\chi2Fisher}$=0.01$^{2-3}$
Master's degree	51/88 (58.8%)	36/42 (85.7%)	7/13 (53.8%)	$p_{\chi2}{}^{1.2.3}$=0.006 $p_{\chi2}$= 0.002$^{1-2}$ $p_{\chi2\ Yates}$=0.78$^{1-3}$ $p_{\chi2\ Yates}$=0.04$^{2-3}$
Bachelor's degree	3/88 (3.53 %)	0/42 (0.00 %)	0/13 (0.00 %)	$p_{\chi2}{}^{1.2.3}$=0.37
Some college	17/88 (18.8%)	3/42 (7.14%)	1/13 (7.69%)	$p_{\chi2}{}^{1.2.3}$=0.16
High school or equivalent	1/88 (1.18%)	0/42 (0.00%)	0/13 (0.00%)	$p_{\chi2}{}^{1.2.3}$=0.72
Incomplete high school	5/88 (5.88%)	0/42 (0.00%)	0/13 (0.00%)	$p_{\chi2}{}^{1.2.3}$=0.18
Middle school only	2/88 (2.35%)	0/42 (0.00%)	0/13 (0.00%)	$p_{\chi2}{}^{1.2.3}$=0.51
No degree	1/88 (1.18%)	0/42 (0.00%)	0/13 (0.00 %)	$p_{\chi2}{}^{1.2.3}$=0.72

$\chi2$ - Pearson Chi-square and Fisher exact one-tailed tests. U - Mann-Whitney U Test

Table S2. Menstrual and reproductive history of healthy controls by ethnicity.

Parameters	**Caucasians n = 88 (1)**	**Asians n = 42 (2)**	**Mixed n = 13 (3)**	***p*-value***
	Mean±SD Median (LQ;UQ)			
Age at menarche, years	13.1±1.21 13.0 (12.0;14.0)	13.5±1.25 13.00 (13.0;14.0)	13.2±1.09 13.0 (13.0;14.0)	$p^{1,2,3}$=0.33
Min length of menstrual cycle, days	26.3±2.24 26.0 (25.0;28.0)	26.7±2.06 27.0 (25.0;28.0)	26.2±2.49 26.0 (25.0;28.0)	$p^{1,2,3}$=0.78
Max length of menstrual cycle, days	29.3±2.23 30.0 (28.0;30.0)	29.9±3.94 30.0 (28.0;30.0)	29.6±2.57 30.0 (27.0;32.0)	$p^{1,2,3}$=0.95
Number of pregnancies	2.3±2.2 2.0 (1.0; 3.0)	2.3±1.8 2.0 (1.0; 3.0)	2.6±1.4 2.0 (2.0; 3.0)	$p^{1,2,3}$ =0.52
Live births	1.7±0.7 2.0 (1.0; 2.0)	1.9±0.9 2.0 (1.0; 3.0)	1.8±0.6 2.0 (1.0; 2.0)	$p^{1,2,3}$ =0.29
Still birth	0.05±0.2 0.00	0.05±0.3 0.00	0.0±0.0 0.00	$p^{1,2,3}$ =0.51

	(0.00; 0.00)	(0.00; 0.00)	(0.00; 0.00)	
Spontaneous abortions	0.1±0.4	0.2±0.5	0.1±0.3	$p^{1,2,3}$=0.63
	0.00	0.00	0.00	
	(0.00; 0.00)	(0.00; 0.00)	(0.00; 0.00)	
Extrauterine pregnancy	0.04±0.2	0.05±0.3	0.1±0.3	$p^{1,2,3}$=0.70
	0.00	0.00	0.00	
	(0.00; 0.00)	(0.00; 0.00)	(0.00; 0.00)	
Missed abortion	0.1±0.4	0.0±0.0	0.2±0.6	$p^{1,2,3}$=0.28
	0.00	0.00	0.00	
	(0.00; 0.00)	(0.00; 0.00)	(0.00; 0.00)	
Medical abortions	0.8±1.5	0.4±0.9	0.9±1.1	$p^{1,2,3}$=0.14
	0.00	0.00	1.00	
	(0.00; 1.00)	(0.00; 0.00)	(0.00; 1.00)	

*Kruskal-Wallis ANOVA by Ranks.

Table S3. Anthropometry, vital signs and pelvic U/S parameters of healthy controls by ethnicity.

Anthropometry And Vital Signs Parameters	**Caucasians n = 88**	**Asians n = 42**	**Mixed n = 13**	***p*-Value***
	Mean±SD Median (LQ;UQ)			
Weight, kg	65.8±10.4	61.2±7.81	60.7±6.38	p_{1-2}=*0,01*
	65.5	61.1 (55.3;66.0)	62.7	p_{1-3}=*0,08*
	(57.1;74.3)		(54.2;65.0)	p_{2-3}=*0,96*
Height,cm	162±5.24	161±4.48	162±5.03	p_{1-2}=*0,17*
	163	160	163	p_{1-3}=*0,89*
	(158;167)	(158;165)	(158;165)	p_{2-3}=*0,46*
WC,cm	24.8±3.20	23.5±3.20	23.0±2.82	p_{1-2}=*0,03*
	24.9	23.3	23.6	p_{1-3}=*0,06*
	(22.1;27.8)	(20.8;25.7)	(20.4;25.1)	p_{2-3}=*0,64*
BMI,kg/m^2	75.4±8.9	75.4±8.2	74.3±8.6	p_{1-2}=*0,83*
	76.5	75.5	72.0	p_{1-3}=*0,53*
	(68.5;82.0)	(68.0;81.0)	(69.0;78.0)	p_{2-3}=*0,62*
Systolic blood pressure, mm Hg	118±9.60	117±11.13	115±9.05	p_{1-2}=*0.78*
	117	117	117	p_{1-3}=*0.428*
	(112;123)	(110;127)	(109;121)	p_{2-3}=*0.677*
Diastolic blood pressure, mm Hg	74.6±7.18	75.1±8.40	76.3±6.12	p_{1-2}=*0.746*
	74.0	75.5	77.0 (71.0;82.0)	p_{1-3}=*0.480*
	(69.5;79.0)	(69.0;82.0)		p_{2-3}=*0.691*
mFG score	0.43±0.72	0.21±0.47	0.31±0.63	p_{1-2}=*0.139*
	0.00	0.00	0.00	p_{1-3}=*0.596*
	(0.00;1.00)	(0.00;0.00)	(0.00;0.00)	p_{2-3}=*0.711*
Pelvic U/S	*Mean±SD Median (LQ;UQ)*			
AFC, right ovary	6.56±2.19	5.56±1.84	5.08±1.44	p_{1-2}=*0.005*
	6.00	5.00 (4.00;7.00)	5.00 (4.00;6.00)	p_{1-3}=*0.008*
	(5.00;8.00)			p_{2-3}=*0.53*
AFC, left ovary	6.44±2.39	5.65 ±2.05	5.39±1.81	p_{1-2}=*0.07*
	6.00	5.00 (4.00;7.00)	6.00 (4.00;6.00)	p_{1-3}=*0.17*
	(5.00;8.00)			p_{2-3}=*0.87*
Volume, right ovary, cm^3	7.33±6.69	6.29±2.32	5.14±1.86	p_{1-2}=*0,48*

	6.09 (5.11;7.77)	6.13 (4.74;7.96)	5.39 (3.43;6.50)	$p_{1-3}=0,04$ $p_{2-3}=0,15$
Volume, left ovary, cm^3	6.25±1.96	5.40±1.96	5.68±1.85	$p_{1-2}=0,01$
	6.17 (4.83;7.29)	5.24 (4.05;6.45)	5.33 (4.57;6.92)	$p_{1-3}=0,37$ $p_{2-3}=0,52$

WC- waist circumference, BMI- body mass index, mFG score- modified Ferriman-Gallwey score, U/S-ultrasound, AFC-antral follicle count, * Mann-Whitney U Test.

Table S4. Androgen profile of healthy controls by age.

Parameters	**<35 Years n = 64**	**≥35 Years n = 79**	***p-Value****
	Mean ± SD Median *(LQ;UQ)*		
TT, ng/dl	26.1±14.0 25.8 (17.3, 34.2)	24.2±15.5 22.0 (13.3, 33.7)	0.22
FAI	1.56±1.41 1.22 (0.60, 2.14)	1.48±1.70 1.20 (0.59, 1.85)	0.71
DHEAS, μg/dl	171±76.9 165 (118, 210)	149±65.9 145 (93.2, 185)	0.08

Abbreviations: TT-total testosterone, FAI—free androgen index, DHEAS- dehydroepiandrosterone sulfate. * Mann-Whitney U Test.

Table S5. The UNLs as defined by the 98th percentiles in healthy controls by age.

Parameters	**<35 Years n = 64**	**≥35 Years n = 79**
	98th Percentile (95%CI)	
TT, ng/dl	55.0 (44.2, 73.0)	70.3 (44.1, 78.0)
FAI	6.29 (3.04,7.32)	4.52 (2.54, 14.0)
DHEAS, μg/dl	366 (284, 374)	328 (234, 355)

Abbreviations: TT-total testosterone, FAI—free androgen index, DHEAS- dehydroepiandrosterone sulfate.

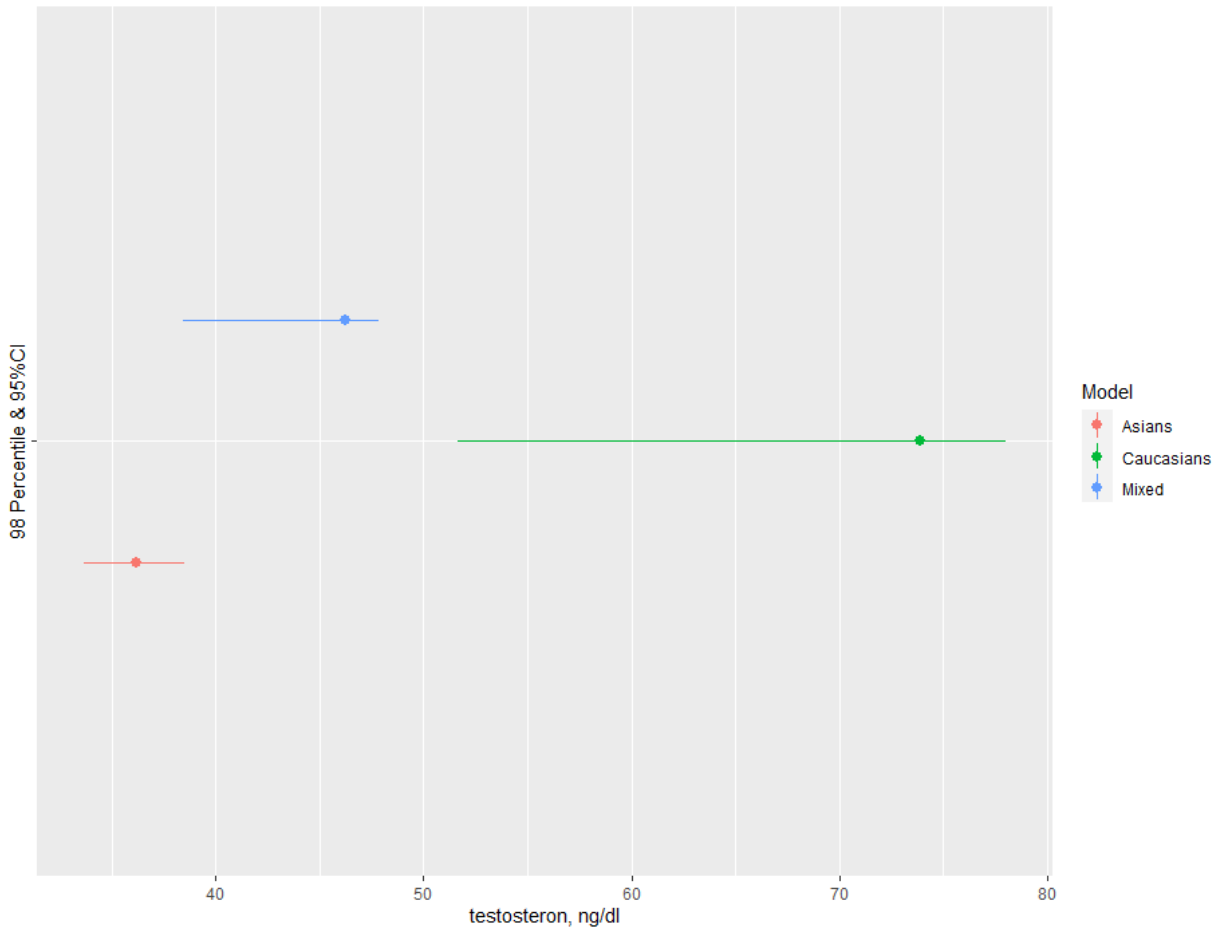

Figure S1. UNLs for the total testosterone (TT) by ethnicity: the analysis of the 95% CIs overlapping.

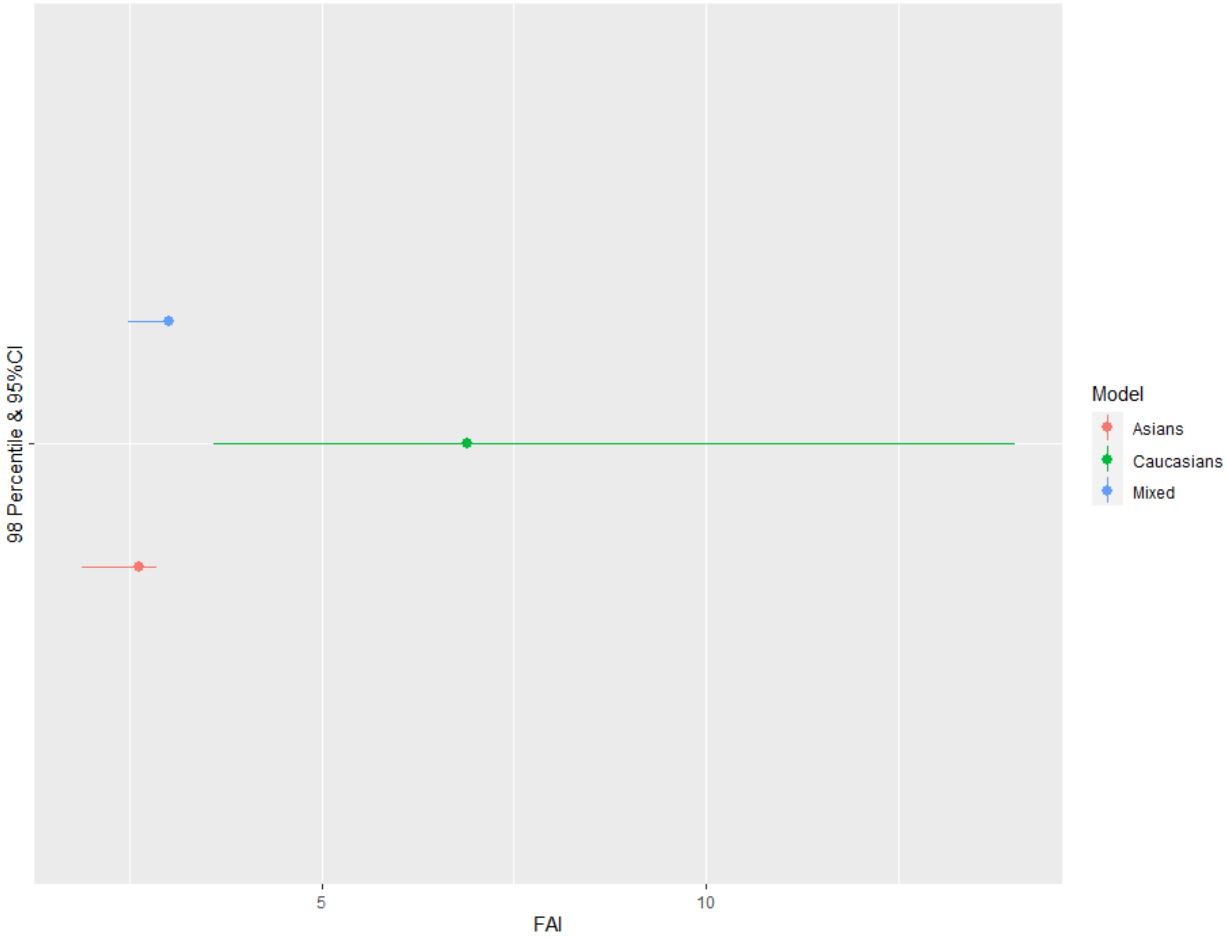

Figure S2. UNLs for free androgen index (FAI) by ethnicity: the analysis of the 95% CIs overlapping.

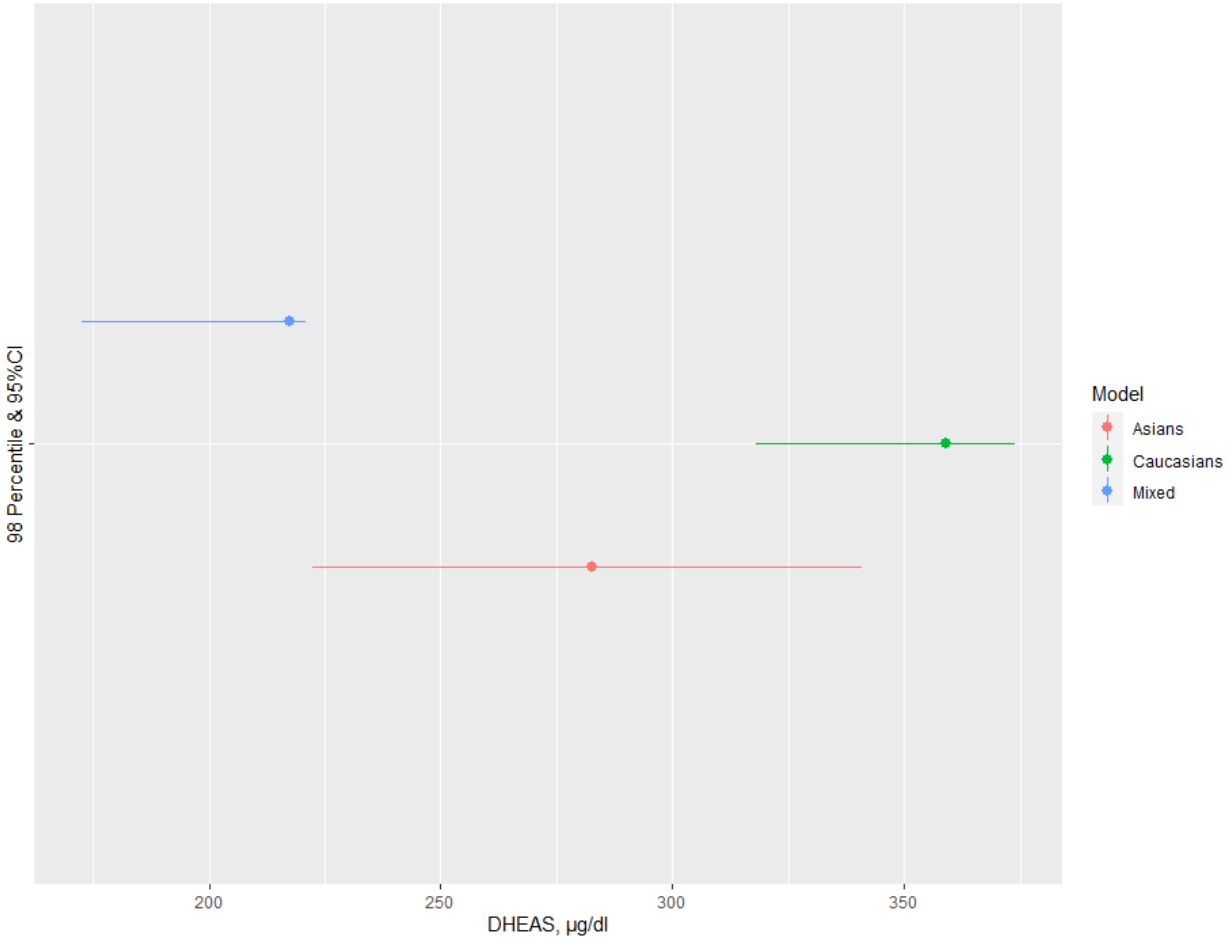

Figure S3. UNLs for DHEAS by ethnicity: the analysis of the 95% CIs overlapping.