Endogenous and exogenous sex hormones are of pivotal importance for women’s health. Hormone therapy has been widely studied but there is limited data about androgen and androgen replacement therapy. The aim of this study was to delineate the possible interrelations between endogenous androgens and women’s particularly pertaining to cardiovascular disease (CVD) and risk markers for CVD in perimenopausal women. A total of 6917 out of 10766 women aged 50-59 years living in the Lund area of southern Sweden completed a generic questionnaire and underwent physical examination and laboratory assessments. According to the hormonal status, 492 (7.1%) were classified as premenopausal with regular menstruation, 3600 (52.1%) were postmenopausal without hormone therapy (HT) and 2816 (40.8%) were postmenopausal women with use of HT. There were 104 women with reported cardiovascular events, each of them were matched to two controls (n=208). Use of hormone therapy and higher serum androgens were accompanied by a lower risk profile for CVD. Women with higher serum androgen (but in the normal range) had more favourable lipid profile. Hormone therapy in women with abnormal serum thyroid stimulating hormone (TSH) seems to improve the lipid profile. Endogenous androgens seem to have a dual influence (both vasodilatatory and vasoconstrictory) on women’s blood pressure depending on women’s health status. Women with lower androgens used more non-hormonal medication and visited health care units more often. Hormone therapy seems to be associated with allergic and upper gastrointestinal problems in postmenopausal women.