Introduction Previous studies have shown higher breast cancer incidence and mortality among Japanese Brazilians than Japanese. To clarify the difference in hormone levels among populations, we compared postmenopausal endogenous sex hormone levels among Japanese living in Japan, Japanese Brazilians living in São Paulo, and non-Japanese Brazilians living in São Paulo.

Methods A cross-sectional study was conducted using a control group of case-control studies in Nagano, Japan and São Paulo, Brazil. Subjects were postmenopausal women aged over 55 years old who provided blood samples. We measured oestradiol, oestrone, androstenedione, dehydroepiandrosterone sulphate (DHEAS), testosterone, and free testosterone by radioimmunoassay, bioavailable oestradiol by the ammonium sulphate precipitation method, and sex-hormone binding globulin (SHBG) by immunoradiometric assay. A total of 363 women were included for the present analyses: 185 Japanese, 44 Japanese Brazilians and 134 non-Japanese Brazilians.

Results Japanese Brazilians had significantly higher levels of oestradiol, bioavailable oestradiol, oestrone, testosterone, and free testosterone, and lower SHBG levels than Japanese. Japanese Brazilians also had significantly higher levels of bioavailable oestradiol, oestrone, and DHEAS, and lower levels of SHBG and androstenedione than non-Japanese Brazilians. Levels of oestradiol, testosterone, and free testosterone, however, did not differ between Japanese Brazilians and non-Japanese Brazilians. These differences were observed even after adjustment for known breast cancer risk factors.

Conclusions We found higher levels of oestrogens and androgens in Japanese Brazilians than in Japanese, and similar to or higher levels than in non-Japanese Brazilians. Our findings may help explain the increase in incidence and mortality of breast cancer among Japanese Brazilians.

Conclusions Patients with lung cancer have an increase in reporting of symptoms to the GP which occurs about 9 months before they are diagnosed. Future work will aim to develop these results into a predictive score to allow earlier diagnosis of lung cancer.

Introduction To target lung cancer awareness campaigns and increase earlier ascertainment of disease, there is a need to identify the sectors of society most at risk of developing lung cancer. Using Experian’s Mosaic social marketing tool (a consumer classification of all UK households and postcodes into 61 groups and 11 types), we aimed to identify the UK populations with the highest incidence of lung cancer.

Methods All incident cases of lung cancer from 2000 to 2009 in a UK computerised primary care database were identified. Lung cancer incidence rates were stratified by 3-yearly calendar periods, age, sex, socioeconomic status, UK health authority and Mosaic groups and types.

Results A total of 12 135 incident cases of lung cancer were identified. Overall incidence of lung cancer was 41.4 per 100,000 person-years and this increased with increasing deprivation. The highest incidence of lung cancer was in the North-West of England and the lowest rate was in London. The Mosaic types with the highest incidence of lung cancer were F39 (dignified dependency), 148 (old people in flats) and 150 (carer-for pensioners).

Conclusions Using Experian Mosaic’s social marketing tool, we have identified wide variations in the incidence of lung cancer, larger than variations by socioeconomic status alone. We have also been able to determine the sectors of UK society and therefore postcodes and neighbourhoods with the highest incidence rates of lung cancer. Application of this knowledge will enable accurate targeting of media campaigns on lung cancer and also aid earlier ascertainment of lung cancer cases.