ERRATA

Erratum to: “Apropos Phenomenon of Female Predominance among Carriers of Reciprocal Translocations with Reproductive Disorders” [Russian Journal of Genetics 53, 504 (2017)]

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Section **Abstract** should read:

Female predominance among carriers of reciprocal translocations (*rec*) has been commonly explained by male sterility, although appropriate comparative studies had not been carried out. The objectives of this study were comparative analysis of rates of carriers of balanced chromosomal rearrangement among patients with infertility and among patients with recurrent miscarriages and comparative analysis of male-to-female ratio (sex ratio, SR) in the carriers. Meta-analysis of data from 34 publications on prevalence of chromosomal rearrangements in couples with reproductive failures showed that among couples with infertility, a carrier of reciprocal translocation was found in 0.48% (74/15306) of males and in 0.41% (64/15456) of females, SR = 1.17, not different statistically from the population value of 1.06 ($p = 0.36$). Carriers of Robertsonian translocations (*rob*) were detected in 0.58% of males and in 0.11% of females, SR = 5.3 ($p = 5 \times 10^{-13}$). Carriers of an inversion (*inv*) were found at

a slightly lower rate among infertile males compared to females, 0.16% vs 0.27%, SR = 0.59 ($p = 0.020$). Among patients with miscarriages, carriers of *rec* were detected at a significantly higher rate compared to patients with infertility, in 0.78% (151/19353) of males and in 1.42% (281/19737) of females, SR = 0.55 ($p = 1 \times 10^{-9}$). Carriers of *rob* were found in 0.33% of male patients and in 0.6% of female patients, SR = 0.56 ($p = 9.7 \times 10^{-5}$). Rates of male and female carriers of *inv* were 0.17 and 0.20%, respectively. The data obtained corroborate with the observation of female predominance among fertile carriers of *rob* due to male sterility. However, female predominance among fertile carriers of *rec* cannot be explained by the same reason. Firstly, there is no significant male prevalence among infertile carriers, secondly, the rate of *rec* carriers among infertile males is lower compared to that among fertile patients. This phenomenon might be explained by factors inherent to oogenesis affecting meiotic segregation of rearranged.