

Morphology

Experimental Approaches for Identification of Biomarkers for Male Infertility

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The incidence of disorders of human male reproductive health has increased more than double in the past 30 years while sperm counts have declined by about half. Similar abnormalities occur in sons of women treated with estrogenic hormones during pregnancy and they can be experimentally induced in animals by brief exposure to exogenous estrogens during perinatal life [6]. Hormones (mainly estrogens) determine subsequent risk of cancers of the male reproductive organs, e.g. testicular and prostate cancers. Endocrine disrupting chemicals that are widely spread in the environment act as weak hormones being estrogen or androgen receptor agonists or antagonists. Hence, they cannot be ignored as a potential involvement in human reproductive disease [7].