ISSN(O): 2320-5407 | ISSN(P): 3107-4928

ISSN NO. 2320-5407

International Journal of Advanced Research

Publisher's Name: Jana Publication and Research LLP

www.journalijar.com

REVIEWER'S REPORT

Manuscript No.: IJAR-55939

Title: CYTOGENETIC BIOMARKERS OF REPRODUCTIVE AGING: TELOMERE LENGTH AND CHROMATIN INTEGRITY IN SPERMATOZOA AND LEUKOCYTES OF FARMED DEER

Recommendation:
Accept as it is .....
Accept after minor revision.....
.....
Accept after major revision .....

Rating	Excel.	Good	Fair	Poor
Originality		Good		
Techn. Quality		Good		
Clarity	Excellent			
Significance	Excellent			

Reviewer Name: Dr.Sumathi

Detailed Reviewer's Report

1. **Telomere length refers to the number of tandem nucleotide repeats at the ends of eukaryotic chromosomes that protect them from degradation, typically measuring 5,000–15,000 base pairs in humans. These caps shorten with each cell division; when they become critically short, cells enter senescence (stop dividing) or die, making length a key biological marker of aging and cellular health.**
2. **Reproductive aging is the natural decline in fertility and reproductive function, primarily driven by decreasing egg quantity and quality in women, starting in the mid-30s and culminating in menopause, but also affecting men; this systemic process involves hormonal shifts, increased oxidative stress, and cellular changes, impacting overall health and leading to delayed childbearing, infertility, and potential genetic risks for offspring, with significant research focusing on understanding its complex biological pathways to find interventions for both reproductive and general health.**

ISSN(O): 2320-5407 | ISSN(P): 3107-4928
International Journal of Advanced Research
Publisher's Name: Jana Publication and Research LLP
www.journalijar.com

REVIEWER'S REPORT

3. **Sperm quality refers to the sperm's ability to fertilize an egg, assessed by its count (quantity), motility (movement), and morphology (shape), along with factors like DNA health, with higher quality meaning a greater chance of conception. Key indicators include having enough sperm (around 15 million/mL), strong forward movement (motility), and a typical oval head/long tail shape for effective swimming and penetration, all evaluated through a semen analysis.**
4. **Chromatin condensation is the process where a cell's DNA and associated proteins (chromatin) become tightly packed and organized, transforming from dispersed strands into compact, visible chromosomes, crucial for cell division (mitosis/meiosis) to ensure accurate genetic segregation, but also occurring during programmed cell death (apoptosis). This compaction, involving coiling around histones and higher-order folding, allows the vast amount of DNA to fit in the nucleus and regulates gene access.**
5. **A reproductive biomarker is a measurable biological indicator—such as hormones, proteins, or genetic materials found in blood, urine, or tissue—used to assess, monitor, or predict reproductive health, fertility, and developmental stages. These markers, including FSH and estradiol, help diagnose issues like infertility and track pregnancy.**
6. **Key words are good to understand.**
7. **Result part is awesome with tables and pictures.**
8. **Summary points also be included.**
9. **References should be in alphabetical order.**
10. **After a small changes good to publish in your journal.**