



Study pinpoints 45 years as the critical threshold for a significant downturn in male fertility

Media Release, 10 May 2026

Forty-five years has been identified as the critical age threshold at which elevated sperm DNA fragmentation significantly reduces fertility potential in men.

High levels of DNA fragmentation, defined as a breakdown of genetic material inside sperm cells, make it harder for sperm to fertilise an egg with other potential adverse outcomes including impaired embryo development and higher miscarriage rates.

Advanced age is an established risk factor for elevated sperm DNA fragmentation with existing studies suggesting a gradual rise as men get older, but the specific age at which it exceeds the clinical brink has been poorly defined.

However, new research being presented at the 2026 Congress of the Asia Pacific Initiative on Reproduction (ASPIRE) in Beijing has revealed the age group in which the high-risk threshold is crossed.

Clinical embryologist Ms Yixin Seow said 45 to 49-year-old men had been identified as the age group when a significant rise in sperm DNA fragmentation occurs compared to all younger cohorts.

Her research team conducted a retrospective analysis of sperm DNA fragmentation records at a major Malaysian fertility centre with 249 subjects stratified into five age groups from 30 years to 50-plus years.

“The outcome confirmed gradual increases in DNA fragmentation across the age groups, but most noticeably from age 45, after which it plateaus with minimal further increase in men over the age of 50,” Ms Seow said.

“While larger prospective studies are warranted, our research has clearly shown the age group where there is marked downturn in fertility potential.

“We recommend counselling of patients participating in assisted reproductive technology about the potential impact of advancing male age on likely success of conception and ongoing pregnancy

“Additionally, men aged 45-plus should consider sperm DNA fragmentation testing.”

Infertility affects one in every six couples around the world. It is defined as the failure to conceive after a year of unprotected intercourse, or the inability to carry pregnancies to a live birth. The causes of infertility are equally shared between male and female partners.

The ASPIRE Congress at the China National Convention Centre in Beijing has attracted almost 3,000 scientists, clinicians, nurses and counsellors specialising in assisted reproduction.

It has cast a global spotlight on fertility health in the Asia Pacific region which, like other parts of the world, is experiencing a disturbing downturn in fertility rates.

ASPIRE is a unique Asia Pacific taskforce of specialists in the management of fertility and assisted reproductive technology, and it is dedicated to advancing access to quality treatment for those experiencing infertility across the region.

For further information on the ASPIRE 2026 Congress, go to <https://www.aspire2026.com>

Interview

Ms Yixin Seow is available for interview.

To arrange, please contact Trevor Gill, ASPIRE Congress Media Relations.

Tel: (Australia) 61 418 821948 or email lighthousepr@adelaide.on.net