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“Until stronger evidence becomes available, PGT-A should continue to be evaluated in research settings”

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Q1 Genetic technologies are advancing at an extraordinary pace. Which developments do you believe will have the greatest impact on reproductive medicine?

I think whole genome sequencing is probably the next major step. Once you're analysing an embryo, it becomes technically possible to look far beyond chromosome number and identify much smaller genetic changes. As sequencing becomes cheaper, that level of information will become increasingly available.

The challenge, however, isn't generating more data. It's deciding what that information actually means. We're going to learn an enormous amount, but we'll also have to distinguish between findings that are genuinely important and those that are unlikely to have much impact on the future individual. We've been able to have perfectly healthy children without all this information, so we need to be careful about how we use it.

At the same time, genetics is moving upstream. Rather than focusing only on embryos, we're increasingly investigating the genetic causes of infertility itself. Expanded carrier screening before treatment is another important development because it allows us to identify couples at risk of passing on recessive disorders before they begin IVF.

Q2 Expanded carrier screening is gaining momentum. Do you see this becoming routine before fertility treatment?

I think that's where we're heading. If both partners carry the same recessive condition, identifying that risk before IVF allows them to make informed reproductive choices, including whether preimplantation genetic testing (PGT) for monogenic disease is appropriate.

Of course, accessibility remains a major issue. Reproductive medicine is expensive, and genetic testing adds another layer of cost. But I see this as part of preventive medicine.

In Belgium, we've gradually expanded reimbursement for several forms of genetic testing, including non-invasive prenatal testing (NIPT). I hope carrier screening will eventually follow the same path, because preventing severe genetic disease benefits both families and healthcare systems.

Q3 PGT for aneuploidy (PGT-A) remains one of the most debated areas in reproductive medicine. Why?

I don't think the debate is about whether PGT-A can ever be useful. The real question is which patients benefit and what outcome we're actually trying to improve.

It's often presented as something that improves success rates, but

if you look at the RCTs, it hasn't been shown to improve live birth rates per patient. That doesn't necessarily mean it has no value. It may reduce miscarriage or shorten the time to pregnancy for certain patient groups, but we still don't know which patients those are.

I think we need a much more measured approach. Until stronger evidence becomes available, PGT-A should continue to be evaluated in research settings so that we can identify who, if anyone, benefits most and what outcomes it genuinely improves.

Q4 Why do you think PGT-A has become so widely adopted despite the remaining uncertainty?

I think enthusiasm for new technologies can sometimes outpace the evidence. The technology itself isn't the problem. The question is whether we're introducing it because we know it benefits patients or simply because it's available.

One thing I've noticed is that many of the strongest advocates tend to work in commercial settings, whereas many of the people calling for greater caution are academics who spend their

time evaluating the evidence. That doesn't automatically mean one group is right and the other is wrong, but it does remind us that we need robust data before introducing new technologies into routine clinical practice.

Evidence-based medicine means resisting the temptation to assume that a technically impressive test automatically leads to better patient outcomes. We still need to establish which patients benefit and exactly how they benefit.

Q5 As Immediate Past Chair of the European Society of Human Reproduction and Embryology (ESHRE), where do you think the Society should focus over the coming years?

I think certification and accreditation will become increasingly important.

ESHRE is working not only to certify individual embryologists and reproductive medicine specialists, but also to accredit training centres, helping to ensure that practical skills are taught consistently across Europe. It's not enough to assess theoretical knowledge. We also need to make sure people receive high-quality practical training.

Alongside education, I think advocacy has become equally important. Infertility is still underfunded, and reproductive research remains underfunded. Many policymakers still don't fully recognise infertility as a disease, so we have an important role in influencing policy while continuing to provide education, publish evidence-based guidelines, and promote high-quality science.

Q6 Looking ahead, what do you think will define the next decade of reproductive genetics?

I think we'll continue to see more sequencing, more technology, and much more genetic information.

The challenge will be making sure we're using that information to improve patient care rather than simply collecting more data. For me, the future of reproductive genetics isn't about knowing everything we possibly can about the genome. It's about understanding which information genuinely matters, using it responsibly, and making sure innovation is always guided by robust evidence.

