Latest news: Polyendocrine metabolic ovarian syndrome, teplizumab recommendation and promising findings for tegoprubart

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Polyendocrine metabolic ovarian syndrome: the new name for PCOS

A global consortium of experts has reached consensus to replace the term polycystic ovarian syndrome (PCOS) with polyendocrine metabolic ovarian syndrome (PMOS), and has outlined a process for the change. The term PCOS has long been recognised as being inaccurate and potentially harmful.

The syndrome is the most common endocrine disorder in women of reproductive age, affecting more than 170 million people globally during their reproductive years. Characterised by insulin resistance and hyperinsulinaemia, it is associated with increased risk of cardiovascular and cerebrovascular events, type 2 diabetes and impaired glucose tolerance. Pregnancy-related complications include gestational diabetes and venous thromboembolism.

Despite its prevalence, the current name is misleading, implying the presence of pathological ovarian cysts and failing to reflect its diverse endocrine, metabolic, reproductive, psychological and dermatological features. This confusion can delay diagnosis and hinder effective communication between patients and healthcare professionals, contributing to dissatisfaction with care. The reproductive focus of the name may also reinforce stigma, particularly in contexts where fertility is highly valued.

As outlined in *The Lancet*, a rigorous process engaging people with PCOS, multidisciplinary healthcare professionals and organisations worldwide was undertaken to agree the new name. The approach prioritised scientific accuracy, cultural appropriateness, stigma avoidance and feasibility of adoption. Consensus on the term polyendocrine metabolic ovarian syndrome was built through a range of robust methods.

To support the widespread adoption of PMOS, a comprehensive global implementation strategy has been developed. This includes a three-year transition period, education, and alignment with health systems and disease classification. The authors hope that the term will be incorporated into the international guidance when it is updated in 2028.

The full consensus article can be read here.

NICE recommends first drug to delay onset of type 1 diabetes

Teplizumab is set to become the first disease modifying treatment for type 1 diabetes available on the NHS in England and Wales. Following a review of clinical trial evidence, NICE has recommended the treatment in final draft guidance for people aged 8 years and over who have type 1 diabetes in its early, pre-symptomatic stage.

The progression of type 1 diabetes is commonly described in three stages. Stage 1 is marked by the onset of the immune system attacking insulin-producing pancreatic beta cells, with normoglycaemia and no symptoms. In stage 2, dysglycaemia develops, although individuals remain asymptomatic. Clinical diagnosis typically occurs during stage 3, when significant beta-cell loss has occurred and hyperglycaemia leads to the common symptoms of the condition.

Teplizumab (Tzield) is an anti-CD3 monoclonal antibody that modulates the immune response involved in beta-cell destruction. It is administered as a once-daily intravenous infusion over 14 consecutive days, which can be challenging for some patients.

In clinical trials, teplizumab has been shown to delay progression from stage 2 to stage 3 type 1 diabetes by an average of 32 months. This provides individuals with valuable additional time before the onset of symptoms and the need for lifelong insulin therapy. For children and young people, this delay may be particularly important, allowing more time to reach key developmental milestones before diabetes management becomes part of daily life.

Access to teplizumab will depend on identifying those with pre-symptomatic disease. There is currently no national screening programme in the UK, but children aged 2–17 years can be screened through the ELSA study and adults aged 18–70 years through T1DRA. Testing may also occur in people with an

increased familial risk or where clinicians have concerns about dysglycaemia. Work is underway to build the infrastructure needed to support new testing and treatment pathways to make teplizumab available in practice.

NICE estimates that around 1100 people could be eligible in the first year, reflecting those already identified through screening studies. Annual eligibility is expected to stabilise at about 820 from year 3. Around 555 people are expected to take up treatment in year 1, falling to approximately 490 annually thereafter.

Teplizumab will be available in England within 90 days of publication of final NICE guidance. In Wales, people will be able to access it 60 days from 23 June 2026. In Scotland, the Scottish Medicines Consortium expect to publish advice in early 2027, while in Northern Ireland a process exists for reviewing and adopting NICE guidance.

The final draft guidance from NICE can be read here.

Tegoprubart delivers insulin independence in islet cell transplant trial

Trial data presented at the American Diabetes Association's 86th Scientific Sessions highlight the promise of tegoprubart as an immunosuppressive treatment for people with type 1 diabetes receiving pancreatic islet cell transplants. In the pilot study, all 12 participants became insulin independent, with improved transplanted islet survival and no reported episodes of rejection.

Pancreatic islet transplantation is a minimally invasive procedure developed to provide blood glucose control for people with type 1 diabetes and reduce, or eliminate, dependence on insulin. Islets, which contain insulin-secreting beta-cells, are isolated from the pancreas of a deceased donor and infused into the recipient's liver via the portal vein. Once established, they begin to release insulin.

For those receiving donor cells, daily immunosuppressant medication is needed to prevent transplant rejection. However, these drugs, including the commonly used calcineurin inhibitors (CNIs), can damage insulin-producing cells and are associated with kidney toxicity, hypertension and neurological side effects.

As part of a CNI-free pilot study, the Eledon investigators evaluated tegoprubart, a humanised monoclonal antibody, for its potential to protect islet grafts while avoiding CNI-related toxicity. The study enrolled 12 adults with long-standing type 1 diabetes and repeated hypoglycaemic events (median diabetes duration, 33 years; mean HbA_{1c}, 8.0% [64 mmol/mol]).

Following islet transplantation and treatment with tegoprubart, all showed rapid improvement in glycaemic control. Across the cohort, no rejection episodes or signals of graft failure were observed over a median post-transplant follow-up of 8 months and a maximum follow-up of 22 months.

All 12 participants achieved insulin independence, producing their own insulin and no longer requiring exogenous insulin therapy. Each had a most recent HbA_{1c} measurement below the clinical threshold for diabetes of 6.5% (48 mmol/mol), with a cohort mean of 5.4% (36 mmol/mol). No severe hypoglycaemic episodes were reported.

Compared with historical patients treated with CNIs at the same centre, three and five times more transplanted islet cells survived. Tegoprubart was generally well tolerated, with no evidence of the toxic side effects associated with CNIs.

The investigators suggest that the emerging promise of tegoprubart may signal a future in which islet-cell grafts are protected without the burden of traditional immunosuppression. Further research is planned to evaluate tegoprubart in individuals with type 1 diabetes and chronic kidney disease.

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