Pharmacological Management of Paediatric Obesity - Summery Figure

	No insulin resistance or dysglycaemia	Insulin resistance or dysglycaemia present
BMI SDS <2.5 + ≥1 comorbidity	**Dietary and lifestyle moditifications only**	**Dietary and lifestyle modifications only.** Consider metformin particularly if: 1. Confirmed MAFLD, or 2. Long-term use of drugs causing insulin resistance, (e.g. antipsychotics, corticosteroids
BMI SDS ≥2.5 + ≥1 comorbidity	**Start weekly semaglutide (Wegovy®)** In case of reactions to or unavaiblibility of Wegovy®, start daily liraglutide (Saxenda®) Consider genetic investigations	**Start metformin and weekly semaglutide (Wegovy®)** Initiate 2-3 months apart to improve GI tolerance In case of reactions to or unavaiblibility of Wegovy®, start daily liraglutide (Saxenda®) Consider genetic investigations
Confirmed POMC or LEPR deficiency, or Bardet-Biedl Syndrome and BMI SDS ≥2.5	**Start weekly semaglutide (Wegovy®)** If age <12 years, refer to specialist centre* for considering setmelanotide If semaglutide not tolerated or suboptimal response, refer to specialist centre* for considering setmelanotide at the lowest effective dose Continue semaglutide (if tolerated) alongside with careful monitoring for weight and growth * Cambridge for POMC/LEPR deficiency; GOSH or Evelina for Bardet-Biedl syndrome	

- Minimum age for starting therapy: metformin (8 years), GLP-1 receptor agonists (12 years; exceptionally from age 10 years), setmelanotide (6 years).
- Insulin resistance: fasting insulin >10 mU/L if pre-pubertal or >20 mU/L if pubertal/post-pubertal, fasting C-peptide >600 pmol/L, or HOMA-IR score > 4.
- Dysglycaemia: impaired fasting glucose (IFG) or impaired glucose tolerance (IGT) recorded after an oral glucose tolerance test (OGTT), or HbA1c ≥39mmol/mol (5.7%) or type 2 diabetes
- Metabolic syndrome: obesity plus two of insulin resistance/dysglycaemia, dyslipidaemia, and hypertension
- Obesity-related comorbidities: insulin resistance, dysglycaemia, dyslipidaemia, MAFLD, hypertension, obstructive sleep apnoea, impaired mobility due to weight.

DL 07/2025

PIER
Paediatric Innovation, Education and Research Network