



Cardiovascular Risk Estimation

People with diabetes are considered to be at increased risk for cardiovascular events.

Morbidity and mortality from cardiovascular disease are 2-3 times higher in patients with diabetes compared to non-diabetics.

Consider a person to be at high cardiovascular risk for his or her age unless he or she:

- is not overweight, tailoring this with an assessment of body-weight-associated risk according to ethnic group¹²
- is normotensive (< 140/80 mmHg in the absence of antihypertensive therapy)
- does not have microalbuminuria
- does not smoke
- does not have a high-risk lipid profile
- has no history of cardiovascular disease **and**
- has no family history of cardiovascular disease.

(non-hyperglycaemic related risk factors)

If the person is considered not to be at high cardiovascular risk, estimate cardiovascular risk annually using the UK Prospective Diabetes Study (UKPDS) risk engine (www.dtu.ox.ac.uk/index.php?maindoc=/riskengine/).

Full lipid profile (including high-density lipoprotein [HDL] cholesterol and triglyceride estimations) should be undertaken when assessing cardiovascular risk after diagnosis and annually, and before starting lipid-modifying therapy.

Cardiovascular risk factor Management:

All individuals with diabetes should receive Life style advice and multifactorial risk intervention.

1. Diet & physical activity
2. Smoking
3. Anti-platelet therapy
4. Lipid management
5. BP control:

Diet & Physical activity

Encourage healthy balanced diet, moderation in alcohol intake, regular physical activity and weight loss in obese individuals.

Smoking:

All individuals should be encouraged to stop smoking. They should be advised regarding the available smoking cessation services.

Antiplatelet therapy

- Low dose aspirin is NOT recommended for primary prevention of cardiovascular vascular disease in people with diabetes
- Aspirin (75mg daily) is recommended for secondary prevention in individuals with established cardiovascular disease
- Blood pressure should be controlled to 150/90 or below before commencement of aspirin.
- Clopidogrel 75 mg daily can be considered if aspirin is not tolerated.

Lipid Management

Review cardiovascular risk status annually by assessment of cardiovascular risk factors

Full lipid profile (including high-density lipoprotein [HDL] cholesterol and triglyceride estimations) should be undertaken when assessing cardiovascular risk annually, and before starting lipid-modifying therapy.

Whom to consider for Lipid Lowering Therapy:

A. Aged 40 years and above: all individuals unless cardiovascular risk from non-hyperglycaemic related risk factor is low (see below)

B. Below 40 years of age: consider statin therapy if the cardiovascular risk factor profile appears particularly poor (multiple features of the metabolic syndrome, presence of conventional risk factors, microalbuminuria, at-risk ethnic group, or strong family history of premature cardiovascular disease).

C. If cardiovascular risk from non-hyperglycaemic related risk factors is low:

- Assess cardiovascular risk using UKPDS risk engine (www.dtu.ox.ac.uk/index.php?maindoc=/riskengine/).
- Initiate statin therapy if cardiovascular risk exceeds 20% over 10 years

Lipid lowering agents, initiation, monitoring and target:

Please refer to the Royal Wolverhampton Hospital Adult Lipid Lowering Therapy Guidelines 2012