Beta Blockers

What are they?
Beta blockers, also known as beta-adrenergic blocking agents, are medications that reduce blood pressure. Beta blockers work by blocking the effects of the hormone epinephrine, also known as adrenaline. When beta blockers are taken, the heart beats more slowly and with less force, thereby reducing blood pressure. Beta blockers also help blood vessels open up to improve blood flow. They are used to treat angina, high blood pressure, some abnormal heart rhythms, heart failure, myocardial infarction (heart attack), anxiety, overactive thyroid symptoms, glaucoma and migraine.

Status on the prohibited list
Beta-Blockers come under category P2 of the prohibited substances in particular sports.

Examples of beta blockers include:
- Acebutolol (Sectral)
- Atenolol (Tenormin)
- Bisoprolol (Zebeta)
- Metoprolol
- Nadolol (Corgard)
- Nebivolol (Bystolic)
- Propranolol (Inderal LA)

Potential harmful side effects beta-Blockers include:
- Low blood pressure (hypotension)
- Slow heart rate (bradycardia)
- Cardiac failure
- Impaired circulation
- Loss of sleep (insomnia)
- Impotence.

Other side effects include:
- Fatigue/drowsiness
- Dizziness

Who might use them and why?
Athletes may use Beta-blockers to help improve performance where a steady action is required, such as archery/snooker. By monitoring the cardiac output and muscle blood flow caused by the nervous systems response to stress and arousal, beta blockers would generally reduce the ability to perform strenuous physical sports. However, beta blockers are used in precision sports to improve performance in anaerobic events as they have a calming effect, decrease anxiety, nervousness and stabilize motor performance.
Sports Beta blockers are prohibited in

- Aironautic (FAI)
- Archery (FITA, IPC) (also prohibited out of competition)
- Automobile (FIA)
- Billiards (all disciplines) (WCBS)
- Karate (WKF)
- Boules (CMSB)
- Darts (WDF)
- Golf (IGF)
- Shooting (ISSF, IPC) (also prohibited out of competition).
- Powerboating (UIM)
- Skiing/snowboarding (FIS) in ski jumping, freestyle aerials/halfpipe and snowboard halfpipe/big air.