

## **Para-Snowboarder Serves One-Month Suspension**

According to a recent announcement by the International Paralympic Committee (IPC), American para-snowboard athlete Mike Shea has served a one month suspension for an Anti-[Doping Rule Violation](#) committed in March.

Shea returned an adverse analytical finding for Buprenorphine in a urine sample provided on 6 March 2013 at an IPC Alpine Skiing sanctioned competition in Sochi, Russia. [Buprenorphine](#) is included on the World Anti-Doping Agency (WADA) 2013 Prohibited List under the category S7. Narcotics and is considered a "specified substance". It is consequently prohibited under the IPC Anti-Doping Code. The para-snowboarder exercised his right to a hearing during which he provided corroborating evidence to explain how the substance had entered his body.

The IPC panel hearing him was satisfied that he did not take the substance to enhance his performance or mask the use of a performance enhancing substance. A suspension of one month was imposed on Mike Shea in accordance with the IPC Anti-Doping Code though no financial sanctions were imposed on him. However, all his results obtained at the competition in Sochi will be disqualified with all the resulting consequences including forfeiture of any medals, points and prizes.

A statement from the global governing body of the Paralympic Movement reads the IPC remains committed to a doping free sporting environment at all levels as a signatory of the World Anti-Doping Code (WADC) and added the IPC, together with the International Federations and the National Paralympic Committees, established the IPC Anti-Doping Code to prevent doping in sport for Paralympic athletes, in the spirit of fair play.

Buprenorphine is a semi-synthetic opioid that is used to treat opioid addiction in higher dosages and for controlling moderate acute pain in non-opioid-tolerant individuals in lower dosages. It is a semi-synthetic derivative of thebaine, one of the most chemically reactive morphine alkaloids. A  $\mu$ -opioid receptor agonist with high affinity but low intrinsic activity, Buprenorphine is generally defined as a partial  $\mu$ -opioid agonist that shows high affinity for and slow dissociation from the  $\mu$ -opioid receptor. The drug, in recent years, has been introduced in most European countries as a transdermal formulation for the treatment of chronic pain. This drug is metabolized by the liver, via CYP3A4 (also CYP2C8 seems to be involved) isozymes of the cytochrome P450 enzyme system, into norbuprenorphine (by N-dealkylation) and is best used in opioid-naïve patients.

Buprenorphine was rescheduled to Schedule III drug from Schedule V just before FDA approval of Suboxone and Subutex in the United States. It is also used to control moderate chronic pain and is available in a variety of formulations: Subutex, Suboxone (Buprenorphine HCl and naloxone HCl; typically used for opioid addiction), Temgesic (sublingual tablets for moderate to severe pain), Buprenex (solutions for injection often used for acute pain in primary-care settings), Norspan and Butrans (transdermal preparations used for chronic pain). Side effects associated with overdose or abuse of buprenorphine includes nausea and vomiting, drowsiness, dizziness, headache, memory loss, cognitive and neural inhibition, perspiration, itchiness, dry mouth, miosis, orthostatic hypotension, male ejaculatory difficulty, decreased libido, and urinary retention.