Addendum to ACMD's report on tryptamines

On 10th June 2014 the Advisory Council on the Misuse of Drugs (ACMD) provided advice to the Minister for Crime Prevention in relation to an updated generic definition for tryptamine compounds.

The ACMD would like to propose a clarification to the chemical names of the LSD-related materials in this report and a correction to Figure 6(a) in the report (the chemical structure of (6a*R*,9*R*)-4-acetyl-*N*,*N*-diethyl-7-methyl-4,6,6a,7,8,9-hexahydroindolo[4,3-*fg*]quinoline-9-carboxamide ('**ALD-52**')).

The chemical names of the LSD-related materials are included in a revised paragraph 8.4 and a revised recommendation (paragraph 15.2).

This revision does not impact on the ACMD advice in terms of classification under the Misuse of Drugs Act 1971 or scheduling under the Misuse of Drugs Regulations 2001 (as amended).

Revised paragraph 8.4

- 8.4 These include the TIHKAL materials shown in Figure 6:
 - a) (6a*R*,9*R*)-4-acetyl-*N*,*N*-diethyl-7-methyl-4,6,6a,7,8,9-hexahydroindolo[4,3-*fg*]quinoline-9-carboxamide ('**ALD-52**') (*LSD with an acetyl group on the tryptamine nitrogen*),
 - b) (6a*R*,9*R*)-*N*,*N*-diethyl-7-ethyl-4,6,6a,7,8,9-hexahydroindolo[4,3-fg]quinoline-9-carboxamide ('ETH-LAD'), (6a*R*,9*R*)-*N*,*N*-diethyl-7-propyl-4,6,6a,7,8,9-hexahydroindolo[4,3-fg]quinoline-9-carboxamide ('PRO-LAD') and (6a*R*,9*R*)-*N*,*N*-diethyl-7-allyl-4,6,6a,7,8,9-hexahydroindolo[4,3-fg]quinoline-9-carboxamide ('AL-LAD') (*LSD with, respectively, ethyl, propyl and allyl groups replacing the methyl group on the 6-position nitrogen*),
 - c) as well as 2,4-dimethylazetidinyl{(6aR,9R)-7-methyl-4,6,6a,7,8,9-hexahydroindolo[4,3-fg]quinolin-9-yl}methanone ('**LSZ**') (lysergic acid 2,4-dimethylazetidide), developed by Nichols' group at Purdue University, which has a rigid four-membered azetidine ring analogue of the diethyl groups on the amide nitrogen of LSD and which is reported to be particularly potent.

Revised Figure 6(a)

Revised recommendation (paragraph 15.2)

15.2 For the lysergamide-related materials, there is a need to control:

- i. replacement of the methyl group at the 6- position by other groups (ethyl, propyl, allyl)
- ii. substitution at the 1- position indole nitrogen by acetyl
- iii. substitution at the carboxamide nitrogen by other than N-alkyl

Given the relatively small number of materials involved:

- (6aR,9R)-N,N-diethyl-7-allyl-4,6,6a,7,8,9-hexahydroindolo[4,3-fg]quinoline-9-carboxamide (AL-LAD);
- (6a*R*,9*R*)-*N*,*N*-diethyl-7-ethyl-4,6,6a,7,8,9-hexahydroindolo[4,3-fg]quinoline-9-carboxamide (ETH-LAD);
- (6aR,9R)-N,N-diethyl-7-propyl-4,6,6a,7,8,9-hexahydroindolo[4,3-fg]quinoline-9-carboxamide (PRO-LAD);
- (6aR,9R)-4-acetyl-N,N-diethyl-7-methyl-4,6,6a,7,8,9hexahydroindolo[4,3-fg]quinoline-9-carboxamide (ALD-52); and,
- 2,4-dimethylazetidinyl{(6a*R*,9*R*)-7-methyl-4,6,6a,7,8,9-hexahydroindolo[4,3-*fg*]quinolin-9-yl}methanone (LSZ);

this is most simply achieved by adding them to the Misuse of Drugs Act 1971 by name.