Fitness to drive measures for chronic users of ICADTS category III drugs; ‘do not drive’.

Advise them to drive if they are fit for it.

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**Goal**

Assess fitness to drive from:
- A highway drive
- Neurological test battery
- Simulator drive

(develop criteria / find correlates)

**Design**

Three medicine groups:

<table>
<thead>
<tr>
<th>Type \ using (months)</th>
<th>6-36</th>
<th>&gt;36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antidepressants</td>
<td>n=20</td>
<td>n=20</td>
</tr>
<tr>
<td>Anxiolytics</td>
<td>n=20</td>
<td>n=20</td>
</tr>
<tr>
<td>Hypnotics</td>
<td>n=20</td>
<td>n=20</td>
</tr>
<tr>
<td>Control Group</td>
<td>n=120</td>
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</table>

**Background**

The International Council on Alcohol, Drugs, and Traffic Safety (ICADTS) classifies the impairing properties of medicinal drugs on driving performance into one of three categories:

(I) presumed safe
(II) moderate adverse effects
(III) potentially dangerous

This classification is largely based on pharmacological studies of brief drug use on healthy subjects. Not enough is known about the impairing effects on chronic drug users who may develop a tolerance for side effects and thus could be fit to drive.

**Methods**

Highway drive
(driving 100 km at 95 km/h)
Standard Deviation Lateral Position
Standard Deviation Speed

Neurological test battery
- Trailmaking A and B
- Digit Symbol Substitution Test
- Adaptive Tachistoscopic Traffic Perception Test
- Reaction Test
- Determination Test
- Hazard perception Test
- Psychomotor Vigilance Task

**Simulator drives**

1. Vigilance (lateral control)
2. Motorway merging (critical conflict)
3. Intersections (e.g., critical conflicts)

**Summary. Should ICADTS III users drive?**

Current situation: NO

Future situation: individualised advise

Investigation
Driving in real traffic
Neurological tests
Simulator drive

HFE Europe chapter