

# Relapse rate of substance-induced psychosis and associated risk factors

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# Disclosures

- Lecture fees: Gedeon Richter, Janssen, Lundbeck, Otsuka
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# Background

- Substance-induced psychosis has potential for relapse, i.e. recurrence of psychosis <sup>1,2</sup>
- Co-occurring drug use has been shown to associate with risk of relapse in other psychotic disorders <sup>3</sup>

## Background (2)

- Most previous studies have focused on conversion of substance-induced psychosis to schizophrenia
- Previous studies have described a high rate of SIP recurrence in metamphemtamine users, and recurrent SIP episodes have been also associated with cannabis and alcohol,<sup>1-3</sup>
- Relapse rate in SIP is similar to other psychotic disorders <sup>4</sup>
- Lack of large scale studies

# Aims

- To investigate the risk of substance-induced psychosis (SIP) relapse rate, and
- To determine clinical and socioeconomic risk factors associated with the risk of relapse in SIP

# Study population and design

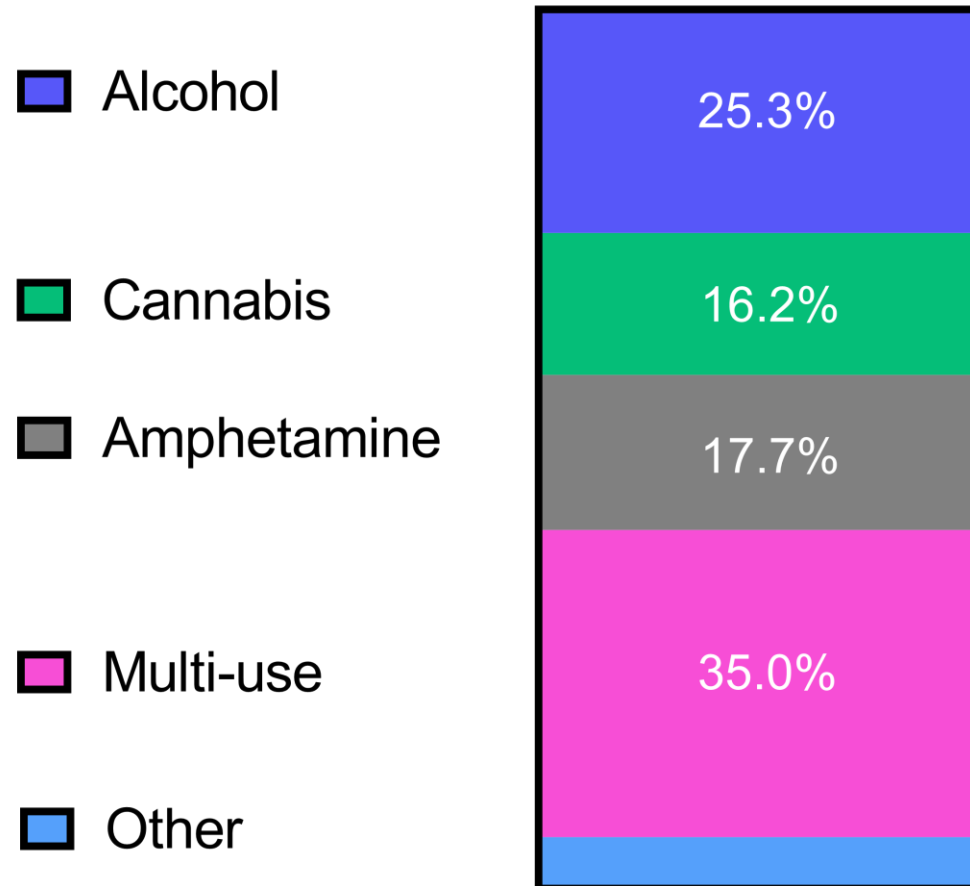
- N=7320 persons with first-time SIP during 2006-2016 identified from Swedish nationwide registers, categorized by type of substance used (as in ICD-10)
  - ❖ No previous non-affective psychosis, organic catatonic disorder, bipolar disorder or residual psychotic disorder after substance use
- ❖ Follow-up was 2 years from first-time SIP, censoring to death, emigration and diagnosis of non-affective psychosis/ bipolar disorder
- ❖ Outcome: hospitalization due to recurrent SIP (F1X.5) >30 days after first SIP
- ❖ Time to event analysis with Cox regression

## Results –recurrence of SIP

- 20.0% (N=1463) had a recurrent SIP during two years of follow-up
- Median time to recurrence was 126 days, IQR 56-321
- 83.3% had the same type of SIP than their first SIP

# Results –distribution of baseline SIP types

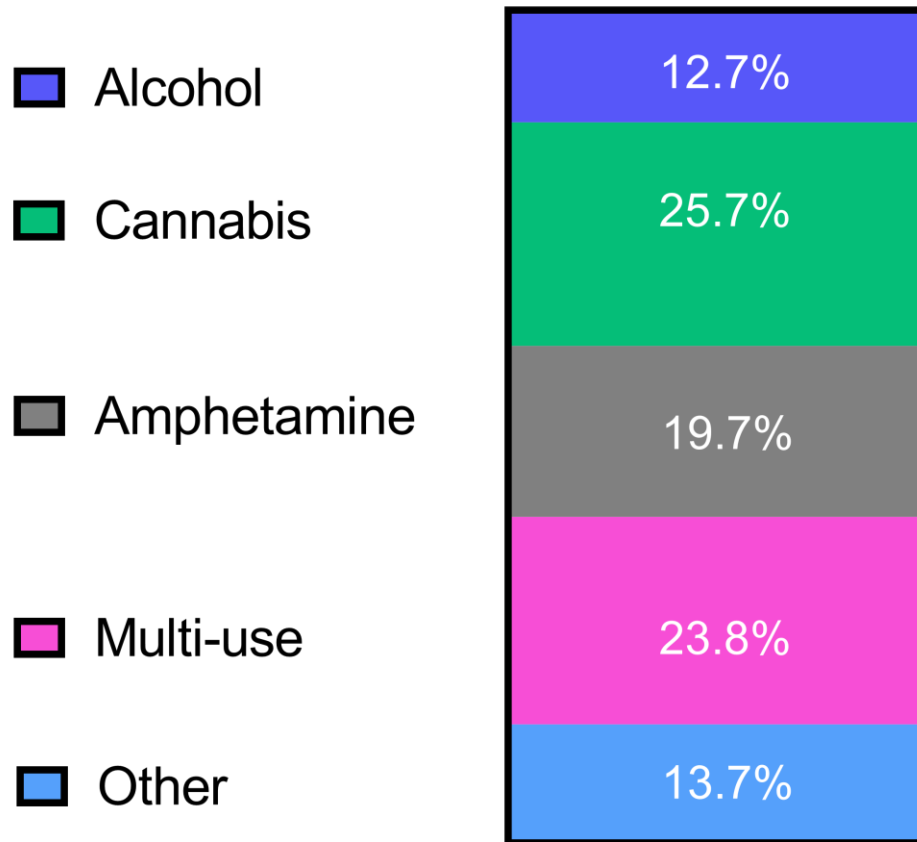
## Distribution of first SIPs



- Multi-use /unspecified SIP was most common type at baseline

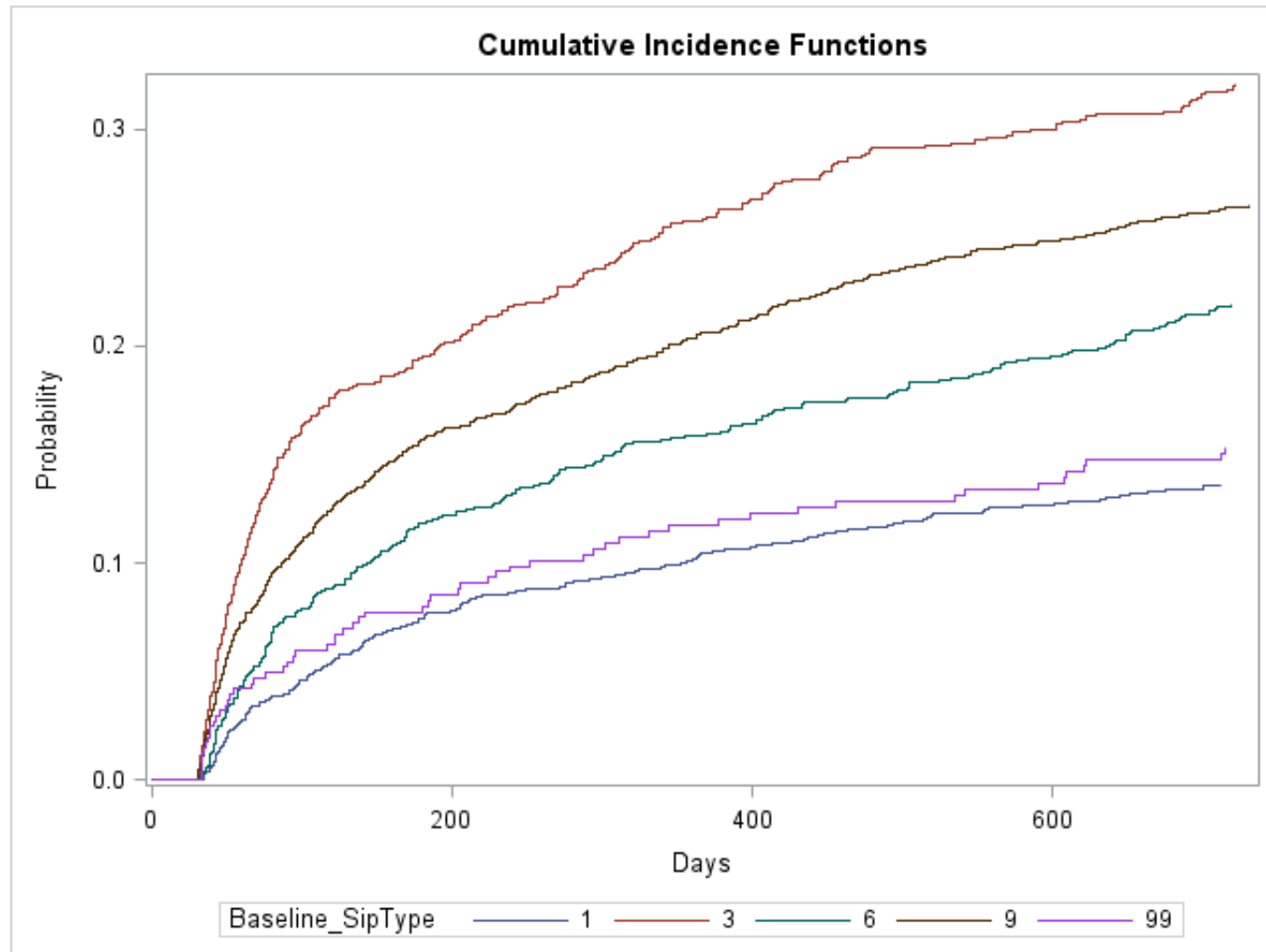


# Proportion of SIP recurrence by baseline SIP type



- Cannabis-induced psychosis most likely to re-occur
- Followed by multi-use and amphetamine-induced psychosis

# Cumulative incidence of recurrent SIPs in time by baseline SIP type



Cannabis-induced psychosis

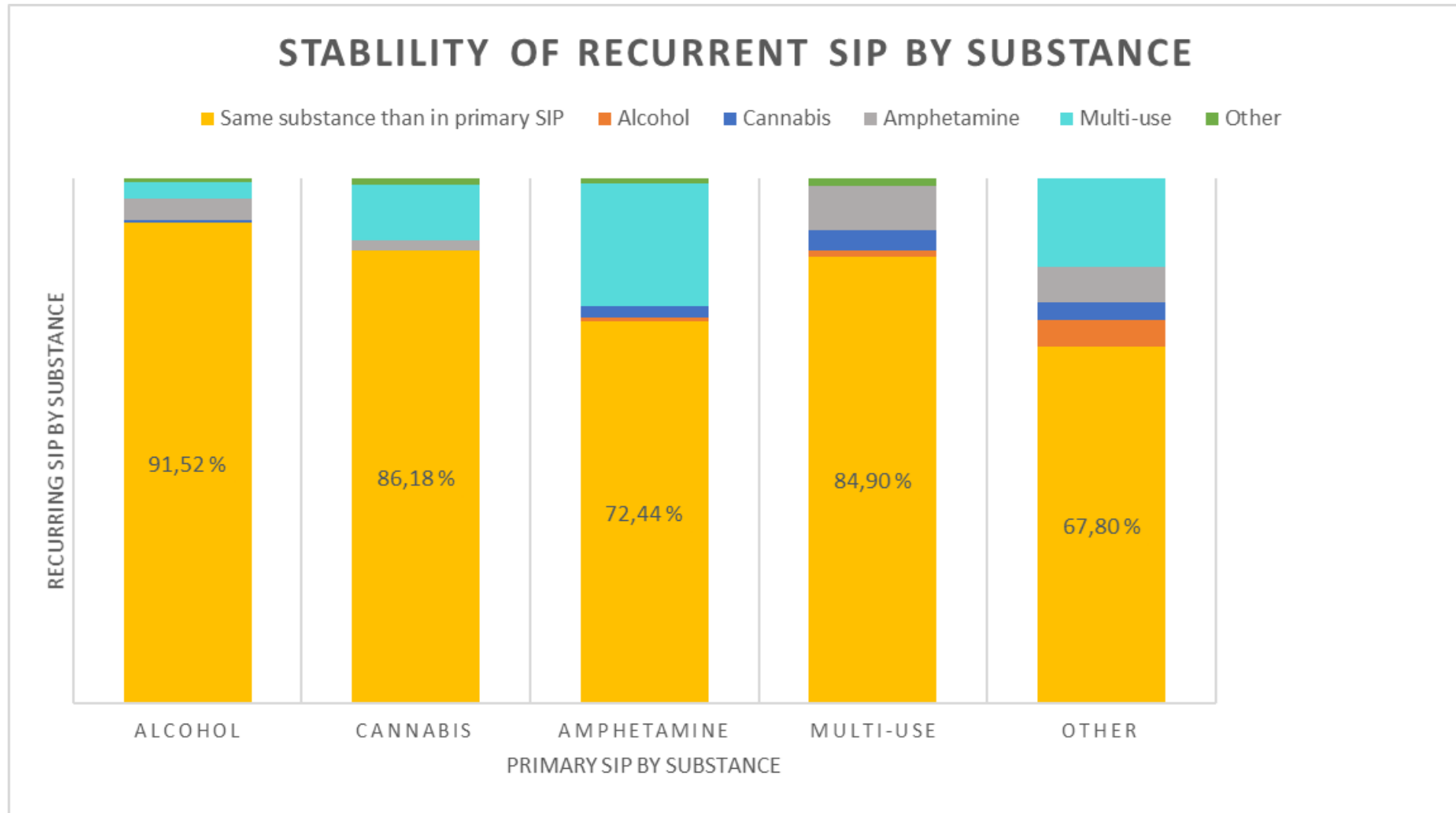
Multi-use induced psychosis

Amphetamine-induced psychosis

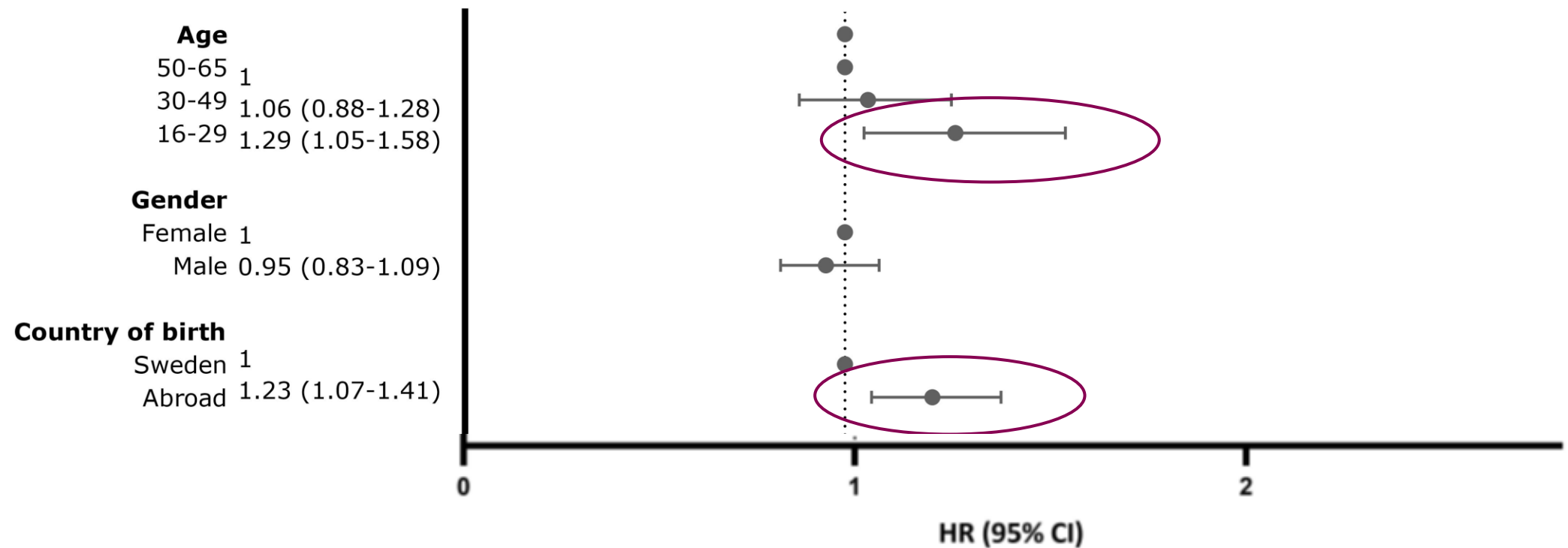
Other substance-induced psychosis

Alcohol-induced psychosis

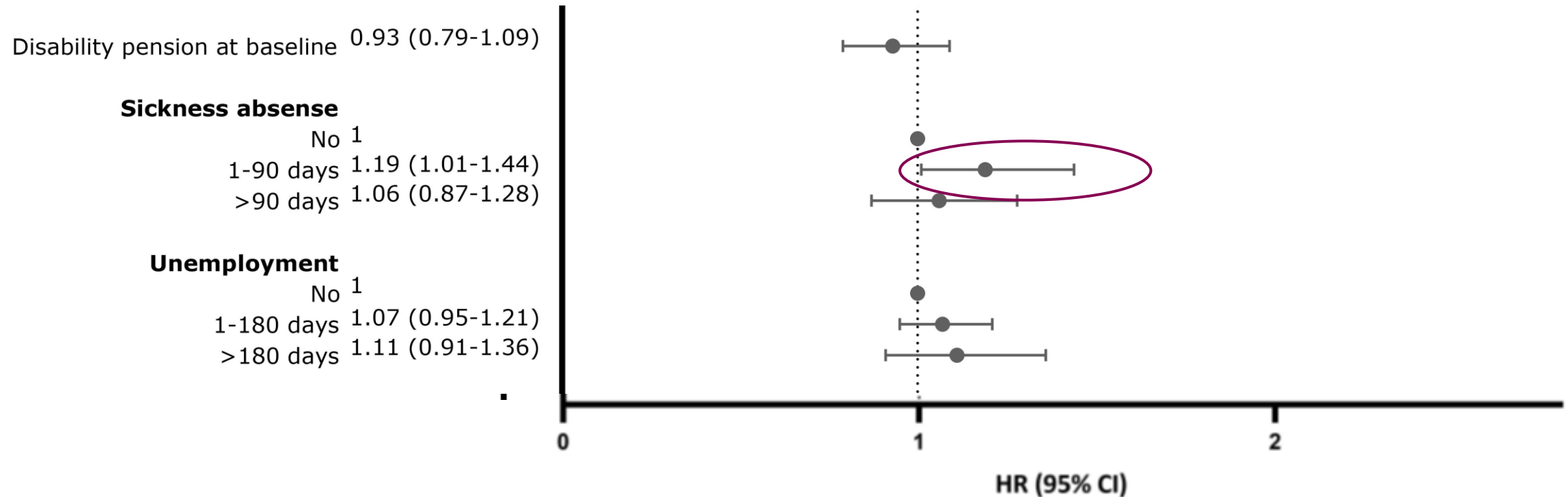
# The same vs. different substance in recurrent SIP



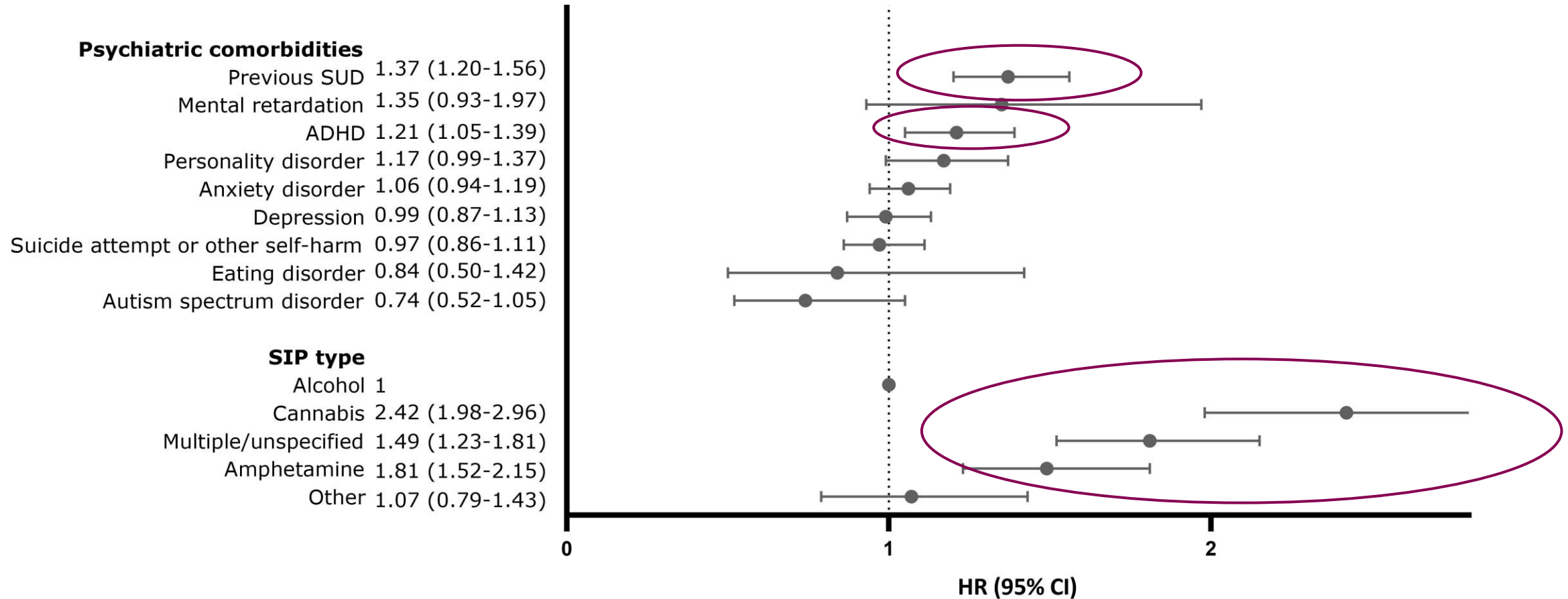
# Factors associated with SIP recurrence (adjusted Cox regression model)



# Factors associated with SIP recurrence (adjusted Cox regression model)



# Factors associated with SIP recurrence (adjusted Cox regression model)



# Strengths and limitations

- Nationwide data on all SIPs treated in specialized health care
- Cover 11 years of SIP diagnoses
- Powered to differentiate between most common substances used/ inducing SIP
- Multi-use/ unspecified category was very large and we cannot differentiate between substances or their combinations within that
- Did not have information on used substances, frequency or intensity of use (or how many continued substance use after first SIP)

# Conclusions

- Recurrence of SIP is very common as 20% have a second episode during first 2 years
- Most recurrent SIPs are presenting with the same substance as the initial SIP
- Cannabis-induced psychosis is most likely to re-occur
- Recurrent SIP is more common among those with previous SUD, ADHD, aged <29 years or having a previous short-term sick leave



# Thanks for the whole research team!

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