

Blocking online alcohol exposure with a internet browser plugin

Submission date 06/02/2026	Recruitment status Not yet recruiting	<input checked="" type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
Registration date 10/02/2026	Overall study status Ongoing	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
Last Edited 09/02/2026	Condition category Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data
		<input checked="" type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

Alcohol imagery is pervasive online. Exposure to alcohol imagery triggers alcohol use and harmful consequences. Through recent advancements in the computational abilities of devices and advances in machine learning, it is now possible to develop a plugin which can detect and block alcohol in images. People with an alcohol use disorder are constantly and sub-consciously seduced to drink through exposure to online alcohol imagery and alcohol ads, which contributes to relapse and treatment failure. Allowing people with an alcohol use disorder to control their online exposure to alcohol imagery could enhance treatment success.

This study aims to test a browser plugin prototype that will block alcohol-related images in a sample of participants treated for alcohol use disorder (AUD). The plugin works similarly to the parental control plugins for sex and violence imagery. Specifically, the study aims to 1) test the feasibility and acceptability of the plugin, and 2) assess the impact of the plugin on perception of alcohol imagery exposure, alcohol craving, and alcohol use.

The project will provide crucial information from end users for the adaptation of a worldwide unique browser plugin to prevent alcohol exposure online. Assessing the acceptability and feasibility of the plugin will lay the foundation for a future large randomized trial.

Who can participate?

Adult patients with AUD.

What does the study involve?

The study will be a pilot study with follow-up at 1 and 3 months with an online questionnaire. Participants will be randomly assigned (1:1) to receive access to a browser plugin blocking alcohol imagery or to a control group (access to the plugin provided 3 months later). Study measures will include: hours of online presence, perception of online exposure to alcohol imagery, alcohol use, and alcohol craving. In the intervention group, acceptability of the plugin will be assessed. Participants will also be asked whether they would be willing to use it in the future. Feasibility will be measured by whether the participants kept the plugin active during the intervention period. As this study will be a pilot trial, focus will be on descriptive statistics and effect size estimations using confidence intervals, rather than statistical hypothesis testing.

Descriptive analyses will be conducted on measures of acceptability and feasibility and the confidence intervals will be computed to describe the range of effects on perception of exposure to online alcohol imagery, craving, and alcohol use.

A subset of participants randomized into the browser plugin condition will be invited to a one-to-one audio-recorded semi-structured interview about their experiences with the plugin at the end of the follow-up period. Audio content will be transcribed verbatim, coded and analyzed using inductive research methods.

What are the possible benefits and risks of participating?

Benefits and risks not provided at time of registration

Where is the study run from?

Lausanne University Hospital, Switzerland.

When is the study starting and how long is it expected to run for?

April 2026 to February 2027.

Who is funding the study?

Swiss National Science Foundation, Switzerland.

Who is the main contact?

Prof Nicolas Bertholet, nicolas.bertholet@chuv.ch

Contact information

Type(s)

Principal investigator, Public, Scientific

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Study information

Scientific Title

Blocking online alcohol exposure with a browser plugin: a proof-of-concept mixed methods, pilot randomized controlled trial

Acronym

PLUGIN study

Study objectives

To test a browser plugin prototype that will block alcohol-related images in a sample of participants treated for alcohol use disorder (AUD).

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 27/01/2026, Commission cantonale d'éthique de la recherche sur l'être humain (CER-VD) (Av. de Chailly 23, Lausanne, 1012, Switzerland; +41213161830; scientifique.cer@vd.ch), ref: 2025-02636

Primary study design

Interventional

Allocation

Randomized controlled trial

Masking

Open (masking not used)

Control

Placebo

Assignment

Sequential

Purpose

Prevention

Study type(s)

Health condition(s) or problem(s) studied

Alcohol use disorder (AUD)

Interventions

The study intervention will be to receive access to a browser plugin blocking alcohol imagery online. The browser plugin prototype is a Chrome extension implemented using a deep learning software framework designed to train deep learning models for the browser environment. The plugin will work by intercepting and scanning every image on a webpage. It will blur the image if it is identified as depicting alcohol. In this pilot phase, it has been chosen to focus on one internet browser. Chrome has been chosen to develop the first prototype as it is the browser with the largest market share in Switzerland (48%).

Intervention: participants in the intervention group will receive access to a plugin blocking (i.e. blurring) alcohol imagery online. The plugin has an “enabled” and a “disabled” button, and thus can be activated or deactivated as the users want. In the intervention group, participants will be provided with the plugin and will be able to use it as much or as little as they want. The study is a pilot trial in which assessing the acceptability and feasibility of this approach is key.

Control: participants in the control group will not be given access to the plugin (no intervention control condition). They will be able to install it at the end of the study.

Intervention Type

Other

Primary outcome(s)

1. Perception of online exposure to alcohol imagery measured using the self reported number of alcohol images seen per hour of online presence at 1 and 3 months
2. Feasibility and acceptability: plugin activation, intervention group only, measured using self-report and usage statistics at 1 and 3 months
3. feasibility and acceptability: Chrome usage, intervention group only, measured using self-reported compliance with using the Chrome browser for online activities at 1 and 3 months
4. Acceptability, intervention group only, measured using items adapted from Van DerLaan and from the Client Satisfaction Questionnaire for Internet interventions (CSQ-I) at 1 and 3 months

Key secondary outcome(s)

1. alcohol craving measured using the Mini Alcohol Craving Experience Questionnaire at 1 and 3 months
2. Alcohol use measured using self reported quantity and frequency questions on alcohol use quantity, frequency, and heavy drinking days at 1 and 3 months

Completion date

28/02/2027

Eligibility

Key inclusion criteria

1. Age 18 or over
2. Current diagnostic of AUD
3. No alcohol use in the past 5 days
4. Using a personal computer to access the internet
5. Willingness to complete the follow-up assessments
6. Willingness to install the plugin and to share its usage data
7. Willingness to use Chrome as their main browser (as the prototype has been developed as a Chrome extension)
8. Able to understand and to sign a written informed consent (written in French) prior to the study

Healthy volunteers allowed

No

Age group

Mixed

Lower age limit

18 years

Upper age limit

100 years

Sex

All

Total final enrolment

0

Key exclusion criteria

People admitted under court order or mandated treatment

Date of first enrolment

01/04/2026

Date of final enrolment

01/11/2026

Locations**Countries of recruitment**

Switzerland

Sponsor information**Organisation**

University Hospital of Lausanne

ROR

<https://ror.org/05a353079>

Funder(s)**Funder type****Funder Name**

Schweizerischer Nationalfonds zur Förderung der Wissenschaftlichen Forschung

Alternative Name(s)

Schweizerischer Nationalfonds, Swiss National Science Foundation, Fonds National Suisse de la Recherche Scientifique, Fondo Nazionale Svizzero per la Ricerca Scientifica, Fonds National Suisse, Fondo Nazionale Svizzero, Schweizerische Nationalfonds, The Swiss National Science Foundation (SNSF), SNF, SNSF, FNS

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Switzerland

Results and Publications

Individual participant data (IPD) sharing plan**IPD sharing plan summary**

Not expected to be made available