We aimed at better evaluate neglect symptoms and tested a new way to attempt to reduce them.  

**Objective 1**  
*Adaptation of an existing evaluation tool with more ecological stimuli/format*

**Introduction**  
One of the current issue in hemineglect evaluation is the lack of neuropsychological ecological tools.

In an attempt to reduce the gap between traditional tests and real-life conditions, we created a new task by adapting the format and the items of a well-known test (Line cancellation, BIT).

We tested the sensitivity and specificity of our task.

**Methods**  
All participants were included. A specific neglect battery (BEN²) was used to assess neglect syndrome before using the new task.

ROC curves were calculated and are shown on figure 3.

**Results**  
A very good sensibility/specificity ratio was found.

**Objective 2**  
*Use of a specific lighting condition to improve neglect syndrome*

**Introduction**  
We decided to administer our ecological task in a specific ‘light corridor’ allowing modulation of ambient light by varying different sources of dimmable lights (Fig 4).

We used specific lighting conditions to enhance perceived salience of left-sided presented stimuli. In so doing, we aimed at modifying attentional prioritization in our neglect patients.

**Methods**  
Only brain injured patients with and without signs of spatial neglect underwent this evaluation with specifically lighting conditions versus neutral lighting conditions.

**Results**  
Among neglect patients, although we found an expected effect of the side, salience effect and interaction effect did not reach significance, probably due to our poor number of patients included (Fig 5).

Nevertheless, at a clinical level, four patients improved their performance following lighting salience, two remained stable and two worsened.

Combined with previous preliminary data (unpublished), this lead us to be confident in the possibility to act on attentional prioritization by manipulating lighting environment.

**Our ecological adaptation shows a good sensitivity/specificity ratio**

Acting on attentional prioritization by manipulating lighting environment seems possible

More data are needed to better quantify these effects