

11 December 2018, Barcelona

To whom it may concern,

The manuscript **“Characterization of Hepatitis B Virus X Gene Quasispecies Complexity in Monoinfection and Hepatitis Delta Virus Superinfection”** has been read and revised by Celine Cavallo, a native US authors’ editor and translator from Spanish to English with 30 years’ experience working with numerous research teams in Spain. I am a member of the Mediterranean Editors and Translators Association, a not-for-profit organization aimed at improving translation work in the Mediterranean area, and am currently on the team translating the online English version of the *Revista Española de Cardiología*, the journal of the Spanish Society of Cardiology. I have worked on hundreds of studies, examples of which can be found online by searching within quotes “thank Celine Cavallo”.

The revised version of the manuscript has been approved by the authors to ensure that that the language editing does not change the ideas they wish to express.

A handwritten signature in dark ink, reading "Celine Cavallo". The signature is written in a cursive, flowing style. The first name "Celine" is written with a large, looped 'C' and the last name "Cavallo" follows in a similar cursive script.

Celine Cavallo