

Adherence of nicotine containing e-fluids available to Australian consumers to the new TGA standard for vapouriser nicotine (TGO110)

JODY MORGAN^{1,2}, TRISTAN AGOSTINI¹, GRACE GSCHWEND¹, MATILDA HOUSTON¹, CAITLIN JENKINS¹, CARLIE KERRIGAN¹, CELINE KELSO^{1,2,3}.

¹School of Chemistry and Molecular Bioscience, University of Wollongong, Wollongong, NSW, Australia; ²Illawarra Health and Medical Research Institute, University of Wollongong, Wollongong, New South Wales, Australia, ³ Molecular Horizons Institute, University of Wollongong, Wollongong, New South Wales, Australia

Presenter's email: jodym@uow.edu.au

Introduction and Aims: Electronic cigarette use is on the increase in Australia. The TGA recently rescheduled nicotine for use in electronic cigarettes with a new standard (TGO110) to come into place on October 1 2021. This new standard includes a maximum nicotine concentration, specific packaging and labelling requirements as well as a list of banned ingredients. This study aimed to examine samples obtained by our laboratory from 2019-2021 and determine if they adhere to these new standards.

Design and Methods: Nicotine containing electronic cigarette fluid samples were purchased in 2019 (n=33), 2020 (n=5) and 2021 (n=27) by our laboratory. All samples were examined for adherence to packaging and labelling requirements. Additionally, all samples were analysed by gas-chromatography mass spectrometry (GC-MS) to identify a range of common flavouring molecules and carrier fluids and to quantify nicotine.

Results: All samples analysed (n=22 different brands) were fitted with child resistant closures, however, only 77% included a "Keep out of reach of children" label and only 23% included a nicotine concentration in mg/ml. 74% of samples analysed for nicotine concentration (n=65) were >10% from the labelled concentration and some samples contained banned flavouring molecules.

Discussions and Conclusions: Analysis of imported samples from our laboratory suggests that these products have low adherence to the new TGA standard for vapouriser nicotine (TGO110). Of particular concern is the absence of warning labels on products, the presence of banned substances and the poor adherence to accurate nicotine concentrations. These factors place consumers at increased risk of potential harm.

Disclosure of Interest Statement:

Nothing to declare