drugs promising pharmaceutical candidates due to the low potential for drug-drug interactions. Unlike psilocin, psilocybin cannot freely cross the blood-brain barrier, the metabolite being the primary responsible for the psychoactive effects of the drug [4]. Pharmacologically, psilocin act as an agonist or partial agonist at various serotonergic receptors, the subtype 5-HT2A being the most implicated in their pharmacodynamic effects [3]. Recently, growing evidence has being demonstrating the role of epigenetics in the exceptional anti-amnesic effects of psilocybin and psilocin, supporting the traditional therapeutic use of psychedelics to heal past trauma [5]. **Conclusions:** Despite promising findings in therapeutic trials with psilocybin, several factors, including lack of funding, law restrictions in several countries, and hallucinogen use stigma, continue to impose limitations on further research. At some point, regulators might have to make some efforts to overcome these barriers in order to advance our knowledge on the impact of hallucinogens on the treatment of serious mental conditions.

Keywords: hallucinogens; treatment; 5-HT_{2A} receptor; metabolism; epigenetics.

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POSTER 5

The admissibility of criminal profiling in courtroom

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Resumo

Introduction: Criminal Profiling is a forensic technique used to aid in the identification of certain criminal characteristics, such as patterns of behavior and personality [1]. Its use and development has steadily increased over the decades, coupled with the diversification in the range of applications, including the attempted transition from assisting police investigations into a form of forensic evidence admissible in legal proceedings [2]. The introduction of profiling into the courtroom has been controversial, problematic and inconsistent [3]. **Objectives:** This review aims to present an overview of whether criminal profiling can be used as means of evidence in criminal proceedings. **Methods:** Search was performed in Google Scholar using the expression: Criminal AND Profiling AND admissibility AND Court. The database review yielded 17,700 articles, and according to inclusion and exclusion criteria (published between 2000 and February 2022 in English). Articles that did not focus directly on Criminal Profiling´s admissibility were excluded. 5 articles were included in the review. **Results:** The importance of measuring criminal profiling in relation to the current legal standards of admissibility was verified, [4] assessing whether it should be admitted in the Courtroom as scientific evidence [5]. Although some authors argue that the official use of criminal profiling is not reliable enough to be admissible in court, [3] others consider the technique consistent with the existing legal principles and potentially admissible [2]. It was further argued that the underlying principles can be tested, the procedure and basis for completing a profile are subject to peer review, and there are standards for controlling the operation of the technique [4]. Alternatively, some authors claim that criminal profiling should not be admitted in court until its reliability can be objectively determined [3]. **Conclusions:** The understanding of the validity and

admissibility of criminal profiling in the courtroom may contribute to a better analysis of evidence by forensic experts and, subsequently, to improve the quality of judicial decisions in criminal matters, building effective and accountable institutions at all levels. Further studies should evaluate the scientific reliability of the forensic technique and its compliance with the admissibility criteria existing in legal systems.

Keywords: criminal profiling; scientific evidence; reliability test; admissibility criteria.

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POSTER 6

Selegilina: farmacocinética e aspetos clínicos

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Resumo

Introdução: A Selegilina (L-deprenil), é um fármaco da classe dos antiparkinsónicos, razão pela qual é utilizado como tratamento da Doença de Parkinson (DP). Sendo esta uma doença neurodegenerativa progressiva tendo como principal causa a depleção de dopamina. Este composto atua no Sistema Nervoso Central (SNC), inibindo irreversivelmente a Monoamina Oxidase Tipo B (MAO-B), deste modo é capaz de impedir a degradação da dopamina em estadios iniciais da doença, retardando a administração de outros fármacos [1]. **Objetivos:** Este trabalho tem como principal objetivo a compreensão da selegilina tendo em conta a sua farmacocinética bem como a sua aplicabilidade clínica. **Métodos:** A concretização do presente trabalho partiu de alguns artigos/investigações publicadas na PubMed e PubChem, consideradas pertinentes para a compreensão e estudo do fármaco em questão. **Resultados:** A DP tem como principais manifestações clínicas tremores e acinesias, devido a depleção da dopamina. Relativamente à Selegilina, o composto é administrado via oral sendo rapidamente absorvida no trato gastrointestinal. Tal como a maioria dos fármacos, este composto sofre metabolismo de primeira passagem hepática sendo metabolizado em L-metanfetamina, L-anfetamina e L-desmetilselegilina [2]. Uma vez que o composto tem uma baixa biodisponibilidade, atualmente é possível administrá-lo sob a forma de orodispersível. Por fim, no que concerne à sua excreção, ocorre essencialmente pela urina e em menor quantidade (15%) pelas fezes [3]. Embora o composto esteja associado a um leve aumento de enzimas séricas, não se encontra relacionado a lesões hepáticas agudas [1]. **Conclusões:** Em síntese, a Selegilina é um composto com elevado potencial terapêutico, não só para DP como para outras doenças, uma vez que se tem tornado eficaz no tratamento de dependência por nicotina e cocaína. Para além disso, existem ainda estudos que evidenciam a sua empregabilidade em doentes com Doença de Alzheimer [1].

Palavras-chave: selegilina; doença de Parkinson (DP); donoamina oxidase B (MAO-B); dopamina.

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