Recent Research Findings and the Legalization of Hemp

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Regulatory Clean-up

• CBD is the predominant byproduct of hemp
• Hemp-derived CBD is unscheduled, Epidiolex is Schedule V, and synthetic CBD is Schedule I
• Other minor cannabinoids (e.g. CBG, CBN, CBC) can be isolated from hemp: legal and unscheduled products – controlled human studies needed
THC Content

- Hemp is defined as having 0.3% THC or less
- CBD oils sold as hemp found to contain up to 6.4mg/mL THC
- Oral THC doses of 10mg produce mild/moderate drug effects, and can impair cognitive performance

Drug Effect

PASAT
Route of Administration

- Controlled lab studies indicate that vaporized THC produces stronger drug effects than smoked/oral\textsuperscript{2,3}
- Time course differs and blood THC poorly correlates with drug effects for oral dosing\textsuperscript{2,3}
CBD Study

- Vaporized CBD produced discriminable drug effect, but was not THC-like; no cognitive impairment
- No THC in blood after pure CBD; significant increase in blood CBD when THC present
- Two participants had 2 positive drug tests after acute inhalation of drug containing ~4mg THC
Additional Points

• Standards for QC testing and contaminants is urgent
• Long-term health effects of chronic hemp/CBD use has not been systematically studied
• Effects on pregnancy, development, psychiatric, elderly, and other at-risk populations needed
• Pharmacovigilance needed to track AEs
• Labeling should clearly disclose amount of THC, CBD, and any other detectable cannabinoids
• Packaging should be child-proof; sale limited to adults over 18 until safety for children established
Summary/Recommendations

• Variation in scheduling of cannabinoids needs to be reconciled; pathway needed to advance science

• Total THC dose should be limited to mitigate abuse liability, AEs, and impairment

• It is possible that use of legal hemp products can impact drug testing programs

• Drug-drug interactions are a major concern\(^4,5\)

• REGULATION NEEDED IMMEDIATELY FOR CONTENT, QC, AND LABELING; CONSIDER USE OF EXISTING CGMP REGULATIONS FOR DRUGS/SUPPLEMENTS; URGENT NEED TO FUND CANNABIS REGULATORY SCIENCE
References


