TEXAS CANNABIS POLICY CONFERENCE

Safety & Risk: Synthetic, Converted, Natural Cannabinoids

Friday, January 30 | 11:30am–12:30pm

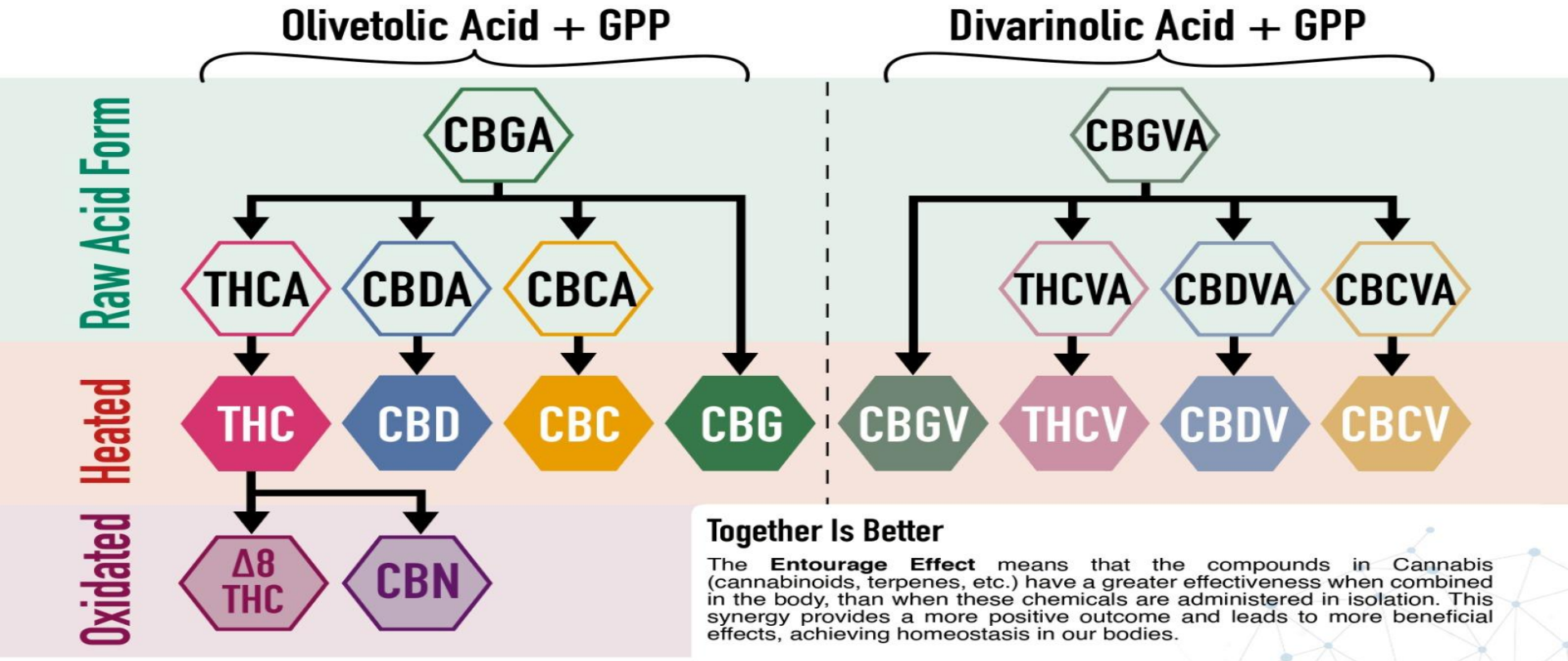
Andrea Baillo, PhD
Rooted For Success

Nick Mortillaro
Evokanna, HILT, ViceVending

Lisa L. Pittman
Pittman Legal

Nishi Whiteley
CReDO Science

Cannabinoid Decarboxilation Process



Together Is Better

The **Entourage Effect** means that the compounds in Cannabis (cannabinoids, terpenes, etc.) have a greater effectiveness when combined in the body, than when these chemicals are administered in isolation. This synergy provides a more positive outcome and leads to more beneficial effects, achieving homeostasis in our bodies.

TEXAS DEFINITIONS (REGULATORY LENS)

Phytocannabinoid	• Chemical substance created naturally by *Cannabis sativa L.* • Extracted by mechanical or chemical processes **or** • Binds to or interacts with cannabinoid receptors of the ECS • Produced by decarboxylation (without chemical catalysts) from naturally occurring cannabinoid acids
Converted CBx	• Chemical substance purposely created by converting a phytocannabinoid • Intended to mimic a phytocannabinoid or interact with the endocannabinoid system • Excludes delta-9 THC or other CBx approved by the commission
Synthetic CBx	• Man-made chemical substance created by chemical synthesis, modification, conversion, in-vitro biosynthesis, or bioconversion • Intended to mimic phytocannabinoids or interact with the endocannabinoid system • Excludes delta-9 THC produced from hemp-derived CBD

Statutory language used for regulatory classification and enforcement.

ASTM D37 PROPOSED LANGUAGE (TECHNICAL LENS)

Natural CBx	• Generated through biological processes in the plant • May include decarboxylation via heating or burning • Typically accompanied by botanically related substances
Semi-synthetic / Converted CBx	• Generated from **botanical precursors** using chemical synthesis • Typically includes botanically related substances **and** synthesis impurities
Synthetic CBx	• Generated from **non-botanical precursors** using chemical synthesis • Typically includes synthesis impurities and lacks botanically related substances

ASTM standards are descriptive tools, not approvals or prohibitions.

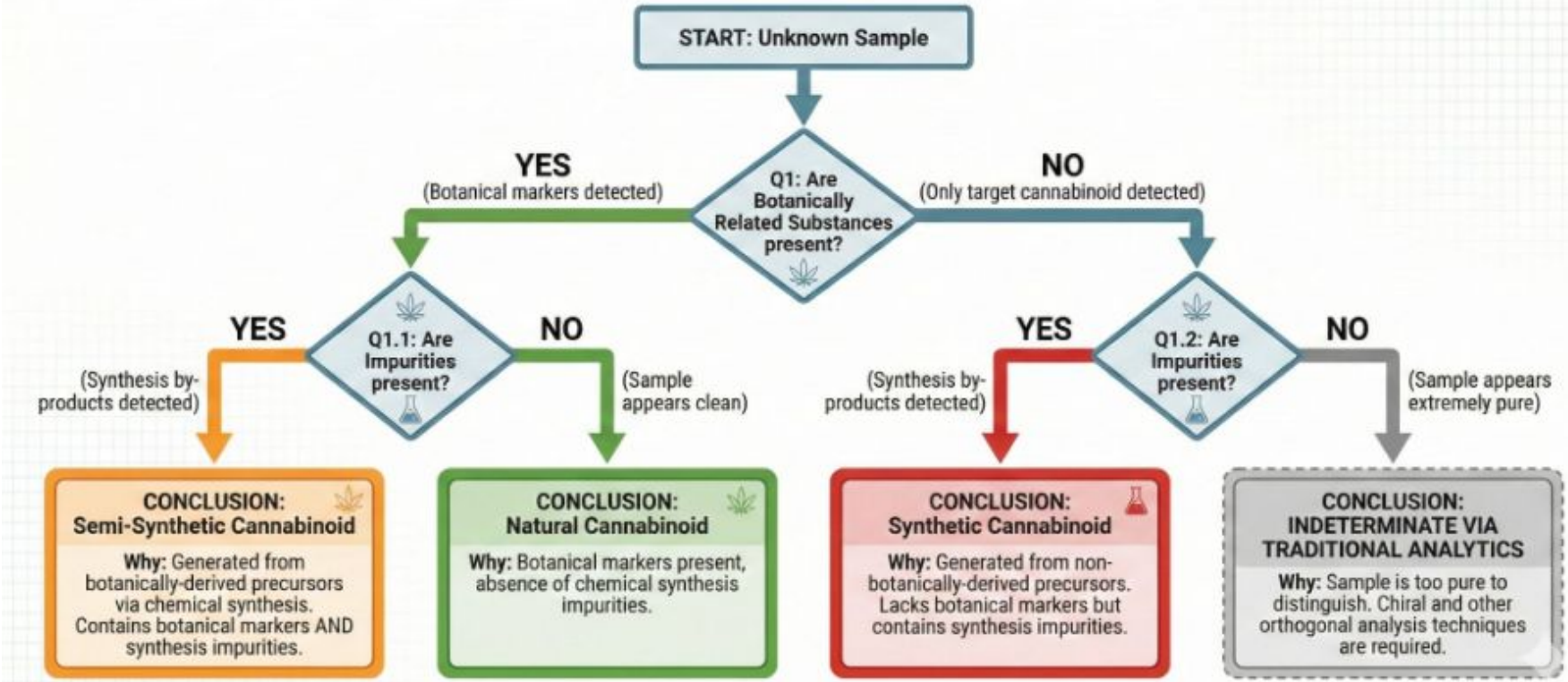
Two Lenses, One Goal

Texas (Policy Lens)	ASTM (Technical Lens)
Intent and outcome based	Process and composition based
Enforceable boundaries	Descriptive classification
Public health protection	Technical clarity
Category driven	Marker driven

What it Means in Practice

- Intent is harder to measure than chemistry
- Categories don’t automatically = safety
- The same molecule can cross categories depending on process
- Definitions manage risk, but don’t replace testing
- Alignment matters more than perfection

Definitions are tools to manage uncertainty, not conclusions about safety.

DECISION TREE: Classifying Unknown Cannabinoid Samples

(Natural, Semi-Synthetic, Synthetic)