# Courtagen to Provide Genetic Profiling of Children with Intractable Epilepsy to Support Clinical Developments with Cannabidiol

*Using the latest next-generation sequencing technologies, Courtagen is collaborating with various academic centers and US physicians to profile the genomes of intractable epilepsy patients to stratify response to cannabidiol (CBD).*

WOBURN, MA, April 2, 2014 – Courtagen Life Sciences, an innovative molecular information company, announces a new comprehensive epilepsy sequencing test designed to sequence 489 genes known to be involved in epilepsy, antiepileptic drug metabolism, and endocannabinoid regulation. This panel is to be the first deployed in the genetic analysis of over 100 children suffering from **intractable epilepsy syndromes**.

The FDA has granted orphan drug designation for GW Pharmaceuticals' Epidiolex®, the product candidate that contains plant-derived **cannabidiol (CBD)** as its active ingredient for use in treating children with **Dravet syndrome, as well as Lennox-Gastaut syndrome**, two rare and severe forms of **infantile-onset, genetic, drug-resistant epilepsy syndromes**. Epidiolex is an oral liquid formulation of a highly purified extract of CBD, a **non-psychoactive** molecule from the **cannabis** plant. The FDA has approved expanded access to the Investigational New Drug (IND) to several independent physicians in the U.S. in order to allow treatment of approximately 125 pediatric epilepsy patients with Epidiolex.

"Courtagen is playing an active role to characterize the genomics of patient response in epilepsy," said Kevin McKernan, Chief Scientific Officer at Courtagen. "We believe our next generation epiSEEK® clinical test is the best product on the market to stratify clinical response to novel antiepileptic drugs. With the comprehensive panel, clinicians can obtain information regarding P450 genes to help understand the possible pharmacogenetics of drug metabolism, and the impact of drug-drug interactions in patients on multiple anti-epileptic medications. "

"Pharmacogenomics is becoming a topic that the clinician needs to have awareness of in the clinic. Some times baffling side effects may only be the patient's personal genetic polymorphism in a cytochrome P450 enzyme, and could therefore be easily modified by dosing changes," said Russell Saneto, DO, PhD at Seattle Children's Hospital. "Knowledge of this could alter drastic medication changes, and enhance the patient's quality of care. "

**About Courtagen Life Sciences, Inc.**

Courtagen is a privately-held life science and molecular information company that converts genomic data into actionable clinical information for critical pediatric neurological and metabolic disorders. Specifically, Courtagen focuses on mitochondrial disorders, epilepsy, and autism spectrum disorders. Courtagen's CLIA certified, state-of-the-art Next Generation Sequencing laboratory integrates genotype, phenotype, and disease mechanism data using cloud-based computing and custom analytical methods to provide the most comprehensive results for clinicians, patients, and their families to better understand and treat their disease. More information can be found at www.courtagen.com.

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