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To whom it may concern,

Mitragynine is a drug derived from the plant known as kratom. The plant is native to Thailand and Malaysia and contains many other indole alkaloids that are structurally related to mitragynine, including 7-hydroxymitragynine. The typical route of ingestion is chewing fresh leaves or brewing tea with the leaves. However, many over-the-counter products sold at convenience stores are found to contain mitragynine. Once ingested, it has a duration of action of 2-5 hours.

At low doses, mitragynine produces stimulant effects and at higher doses, it produces opioid effects. Mitragynine acts at the μ -opioid receptor to elicit analgesic and euphoric effects. The plant has been used therapeutically to treat fever, diarrhea, diabetes and pain. It can also assist with opiate withdrawal symptoms. The plant is also used as a stimulant in Asia to combat fatigue in a manner similar to the use of Khat in Africa. Because of these effects, mitragynine has also become an abused drug as well. Much of this abuse occurs with over-the-counter products; however, since these products are unregulated, the exact dose of mitragynine in these products is unknown.

There are no well-defined studies to show toxicity of mitragynine and it is currently not listed as a scheduled drug in the United States. The DEA has tabled this topic several times although it is rumored that it will become a scheduled drug.

A handwritten signature in black ink, appearing to read 'Barry Levine', is written over a horizontal line.

Barry Levine, Ph.D., FABFT, DABCC-T
Laboratory Director