Combination of Isoform Targeted Histone Deacetylase Inhibitors and Analogs of Protein Kinase C Modulators for HIV Latency Reversal

**Background:**
Human Immunodeficiency Virus (HIV) is currently prevalent amongst 1.2M people in the United States. Statistics also have shown that 36.9M worldwide have been affected by HIV. The current state-of-the-art treatment method is the anti-retroviral therapy (ART), where the plasma viral load is reduced to undetectable levels, resulting in immune recovery, increased lifespan, and improved quality of life. Unfortunately, there remain cells latently infected with virus. When ART is withdrawn, there is a strong rebound of the virus infection leading to significant morbidity.

**Technology Description:**
Researchers at Washington University have developed a new combination of experimental drugs to remove the latently infected cells. This method reactivates the latent virus and purges the reservoirs of latent cells through the administration of latency reversing agents (LRAs). These LRAs have the potential to remove the latently infected cells, which could hypothetically lead to a cure for HIV. This method only activates the T-cells and allows for activation of the provirus with synthetic analogs of natural products without global T-cell activation.

**Indications:**
Latent HIV infection

**Key Advantages:**
- Activation of provirus without global T-cell activation
- Provirus activated with natural product derivatives

**Patent/Patent Application:**
62/419,849

**Lead Inventor:**
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