The present ~~invention~~disclosure provides a layered pellet composition which comprises an inert core, a layer comprising a compound of formula I or a salt thereof as defined herein, and a controlled release layer comprising a rate controlling polymer.

According to a first aspect, there is provided a pharmaceutical modified release composition for a poorly water soluble drug, comprising:

- a compound 2-chloro-4-[1-(4-fluoro-phenyl)-2,5-dimethyl-1H-imidazol-4-ylethynyl]-pyridine and pharmaceutically acceptable salts thereof;

- an insoluble rate-controlling polymer selected from the group consisting of polyvinylacetate, ethylcellulose, polyvinylacetate/povidone copolymers, microcrystalline cellulose and mixtures thereof; and

- a pH responding polymer such as ionic poly(meth)acrylates,

wherein the composition is in the form of a matrix pellet composition, whereby the compound is dispersed within formed matrix pellets.

The present ~~invention~~disclosure also provides methods for the formation of such compositions. The compositions are useful for the treatment of CNS related disorders, including treatment resistant depression (TRD) and Fragile-X syndrome.

To reproducibly control drug release *in vivo*, a soluble polymer, such as polyvinyl alcohol, polyvinyl pyrrolidone, or hypermellose and pH independent insoluble polymer, such as ethylcellulose, polyvinylacetate, or polymethacrylate can be applied in a coating or a matrix. pH is the driving force for dissolution of poorly water-soluble, basic compounds through a membrane or gel layer. The dissolution rate and absorption rate of such compounds are affected by variation in physiological pH of GI tract. Thus, pH will still have a big impact on the solubility of such drugs.

Brief Description of the Drawings

Figure 1 is the dissolution profile of the composition of Example 1 in simulated gastric fluid (SGF) and simulated intestinal fluid (SIF). This is a comparative example, not of the invention.

Figure 2 is the *in vitro* dissolution profile of the matrix tablet composition of Example 2 in simulated gastric fluid (SGF) and simulated intestinal fluid (SIF).

Figure 3 is the *in vitro* dissolution profile of the matrix pellet composition of Example 3 in simulated gastric fluid (SGF) and simulated intestinal fluid (SIF).

Figure 4 is the *in vitro* dissolution profile of the matrix pellet composition of Example 4 in simulated gastric fluid (SGF) and simulated intestinal fluid (SIF).

Figure 5 is the *in vitro* dissolution profile of the layered pellet composition of Example 5 in simulated gastric fluid (SGF) and simulated intestinal fluid (SIF).

Figure 6 is the *in vitro* dissolution profile of the layered pellet composition of Example 6 in simulated gastric fluid (SGF) and simulated intestinal fluid (SIF).