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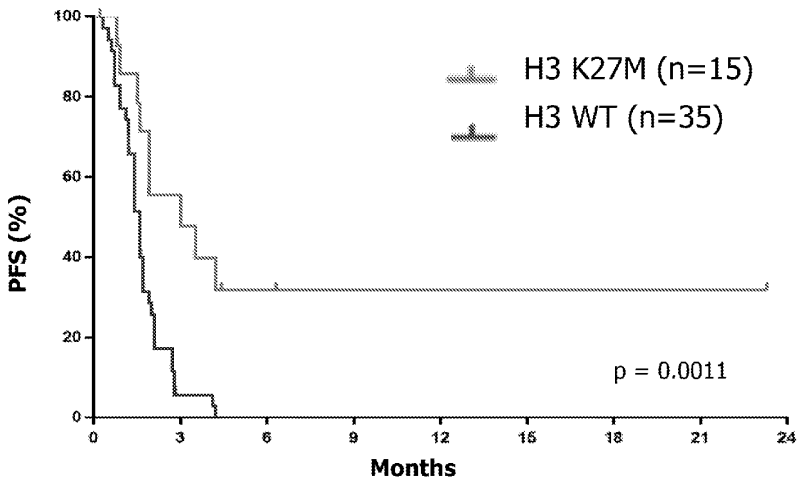


Figure 18

(57) Abstract: Imipridones selectively modulate Class A G protein-coupled receptors (GPCRs), such as the D2-like subfamily of dopamine receptors, and are useful for treating conditions and disorders in need of such modulation, such as cancers. Specifically, the cancer involves a midline structure of the brain, a cancer having a histone H3 mutation, or both. In addition, methods of identifying whether a subject having these conditions, is likely to be responsive to a treatment regimen, such as imipridone administration, are provided. Furthermore, methods of assessing the effectiveness of a treatment regimen, such as imipridone administration, monitoring, or providing a prognosis for a subject with these condition are also provided.

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