Synthesis, Pharmacokinetics, Pharmacodynamics, Dosing, Stability, Safety and Efficacy of Orphan Nano Drugs to Treat High Cholesterol and Related Conditions and to Prevent Cardiovascular Disease Under Synchrotron Radiation

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Introduction

Orphan Nano drugs such as Rituxan, Revlimid, Soliris, Afinitor, Tasigna, Velcade, Avonex, Alimta, Yervoy, Sprycel, Rebi, Kalydeco, Jakavi, Sutent, Kryprolis, Kogenate, NovoSeven, Nexavar, Copaxone, Ibrutinib and their derivatives are versatile intermediates in the field of pharmaceuticals, cosmetics and perfumes. Further, Rituxan, Revlimid, Soliris, Afinitor, Tasigna, Velcade, Avonex, Alimta, Yervoy, Sprycel, Rebi, Kalydeco, Jakavi, Sutent, Kryprolis, Kogenate, NovoSeven, Nexavar, Copaxone, Ibrutinib and their derivatives are important derivatives of Orphan Nano drugs, which have received considerable attention in recent years because of their wide range of biological and pharmaceutical activities [1-16]. Several methods have been reported for the synthesis, pharmacokinetics, pharmacodynamics, dosing, stability, safety and efficacy of these Nano compounds in literature [17-37]. However, most of these methods use solvents which make the workup procedure complicated or use expensive catalysts and high temperatures. Following our continued interest in the synthesis, pharmacokinetics, pharmacodynamics, dosing, stability, safety and efficacy of heterocyclic Nano compounds, we studied the synthesis, pharmacokinetics, pharmacodynamics, dosing, stability, safety and efficacy of Orphan Nano drugs to treat high cholesterol and related conditions and to prevent cardiovascular disease under synchrotron radiation using a one-pot three component reaction under solvent free condition and a new base catalyst can facilitate access to different reactivity and selectivity patterns compared with those observed in common organic solvents due to its unique industrial, biological, medical, medicinal, clinical, pharmaceutical, physical, chemical and safety reasons, Orphan Nano drugs as biological, medical, medicinal, clinical, pharmaceutical, physical and chemical agents have naturally become an alternative as an environmentally benign solvent. Moreover, it has been found that reactions under synchrotron radiation using a one-pot three component reaction under solvent free condition and a new base catalyst can facilitate access to different reactivity and selectivity patterns compared with those observed in common organic solvents due to its unique industrial, biological, medical, medicinal, clinical, pharmaceutical, physical and chemical properties to treat high cholesterol and related conditions and to prevent cardiovascular disease, cystic fibrosis, homozygous familial hypercholesterolemia and Wilson’s disease and so on under synchrotron radiation.

On the other hand, Orphan Nano drugs constitute a major class of naturally occurring Nano compounds and interest in their chemistry and pharmacology continues unabated because of their usefulness as biologically and pharmaceutically active agents. There has been considerable interest in Orphan Nano drugs and their derivatives, not least because of their value for a variety of industrial, biological, medical, medicinal, clinical, pharmaceutical and chemical synthetic uses. As a result, a large number of methods have appeared describing novel synthesis, pharmacokinetics, pharmacodynamics, dosing, stability, safety and efficacy of these Orphan Nano drugs have been of interest because of their biological and pharmaceutical activities and a few methods have been reported for their synthesis, pharmacokinetics, pharmacodynamics, dosing, stability, safety and efficacy.

However, development of more environmentally friendly synthetic process is a rising interest in the industrial, biological, medical, medicinal, clinical, pharmaceutical, physical and chemical communities. In addition to Orphan Nano drugs derivatives such as Rituxan, Revlimid, Soliris, Afinitor, Tasigna, Velcade, Avonex, Alimta, Yervoy, Sprycel, Rebi, Kalydeco, Jakavi, Sutent, Kryprolis, Kogenate, NovoSeven, Nexavar, Copaxone, Ibrutinub and their derivatives have naturally become an alternative as an environmentally benign solvent. Moreover, it has been found that reactions under synchrotron radiation using a one-pot three component reaction under solvent free condition and a new base catalyst can facilitate access to different reactivity and selectivity patterns compared with those observed in common organic solvents due to its unique industrial, biological, medical, medicinal, clinical, pharmaceutical, physical and chemical properties to treat high cholesterol and related conditions and to prevent cardiovascular disease, cystic fibrosis, homozygous familial hypercholesterolemia and Wilson’s disease and so on under synchrotron radiation.

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Received: May 29, 2017 Accepted: June 03, 2017 Published: June 09, 2017


