3.3.1 Number of research papers per teachers in the Journals notified on UGC website during the year

2018-2019

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Calendar Year of publication	ISSN number	Link to the recognition in UGC enlistment of the Journal /Digital Object Identifier (doi) number		
						Link to websiteof the Journal	Link to article / paper/ abstract of the article	Is it listed in UGC Care list
Formulation And EvaluationOf Immediate Release TabletsOf Topiramate Using Croscarmelose Sodium	Ch.Swati, T.Madhuri, D.Venkata Ramana	Pharmaceutics	International Journal of Pharmaceutical Sciences Review and Research	2019	0976 – 044X	https://www.globalresearchonline.net/	https://globalresearchonline.net/journalcontents/v54- 1/12.pdf	Yes
Hypolipidemic Activity Of Parts Of Luffa Aegiptiaca In Poloxomer Induced Hyperlipidemia	Abhilash G1,Anil kumar A,Raja Sheker K, De	Pharmaceutical sciences	International of review in life sciences	2018	2231-2935	https://scienztech.org/index.php/ijrls	https://scienztech.org/index.php/ijrls/article/view/1300	Yes
Comparison Of Antiepileptic Property Of Various Parts Of Datura	Anil Kumar A1 ,Raja Sheker K, Naveen B,Abhilash G	Pharmaceutical sciences	International journal of review in life sciences	2018	2231-2935	https://scienztech.org/index.php/ijrls	https://scienztech.org/index.php/ijrls/article/view/1301	Yes

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Gunthapally (V), Abdullapurmet (M),
R.R. Dist. Telangana.

Effect Of Anti-Epileptic Profile Of Jatamansi On The Brain Enzymes	Naveen B1,Raja Sheker K,Anil Kumar A, Abhilash G	Pharma ceutical sciences	Inter nationa l Journal Of Research In Phyto chemistry & Pharma cology	**2018**	2231-010X	https://journals.indexcopernicus.com/search/details?id=33223	https://scienztech.org/index.php/ijrpp/article/view/1303	Yes
Antipyretic Activity Of The Root Extracts Of Desmodium Gangeticum	Raja Sheker 1,Naveen B,K,Anil Kumar A, Abhilash G	pharmace utical sciences	Internatio nal Journal Of Research In Phyto chemistry & Pharma cology	2018	2231-010X	https://journals.indexcopernicus.com/search/details?id=33223	https://www.researchgate.net/publication/346759659_Antipyretic_activity_of_the_root_extracts_of_Desmodium_Gangeticum	Yes
Evaluation of anti-pyretic acitivty of Dracaena sanderiana by Brewer's yeast method	Pavani CH*	pharma analysis	Inter national Journal Of Novel Tends In Pharmace utical Sciences	2019	2277-2782	https://scienztech.org/index.php/ijntps	https://www.scienztech.org/index.php/ijntps/article/view/1200	Yes
Investigation Of Antiulcer Activity Of Pergularia Extensa Linn	Pavani CH*	pharma analysis	Inter national Journal of Research in Phyto chemistry and Pharma cology	2019	2231-010X	https://scienztech.org/index.php/ijirpp	https://www.researchgate.net/publication/342607284_Investigation_of_antiulcer_activity_of_Pergularia_extensa_Linn	Yes
Development and validation of reverse phase-high-performance liquid chromatography technique for the concomitant assessment of omeprazole and piperine in bulk form	Susithra E ,Pavani CH* ,	pharma analysis	Journal of Pharmace utical and Clinical Research	2018	2455-3891	https://journals.innovareacademics.in/index.php/ajpcr	https://www.researchgate.net/publication/330318760_Development_and_validation_of_reverse_phase-high-performance_liquid_chromatography_technique_for_the_concomitant_assessment_of_omeprazole_and_piperine_in_bulk_form	Yes

Research Article

Formulation and Evaluation of Immediate Release Tablets of Topiramate Using Croscarmelose Sodium

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ABSTRACT

The objective of the present study was to develop immediate release tablets (IRT) of topiramate using different concentrations of croscarmelose sodium (CCS) as superdisintegrant for the treatment of epilepsy. Four different formulations of IRT were prepared using wet granulation method. Different pre compression and post compression characterization of tablet was carried out. In vitro drug release studies were carried out in USP II paddle type dissolution apparatus for different formulation and the batch containing 7.5 mg of CCS per tablet gave maximum amount of drug release of 93.96% at the end of 50 mins. Drug and excipients compatibility studies were carried out through FTIR spectroscopy. FTIR spectroscopy studies reveled that there is no interaction between drug and different excipients used in formulation. Short term stability studies (at 40±2ºC/75±5% RH) on the best formulation indicated that there was no significant change in release profile and drug content after a period of one to three month. Among all the formulations, F4 formulation was finally optimized. It is fulfilling all the parameters satisfactorily. It has shown excellent thickness, hardness, in vitro disintegration and in vitro dissolution.

Keywords: IRT, topiramate, CCS, in vitro drug release study, FTIR spectroscopy.

INTRODUCTION

The oral route[1] of drug administration is one of the popular routes of drug administration. The tablets are still the most commonly used dosage forms due to its continuous development and implementation of innovative ideas to overcome the basic shortcomings of the existing formulations. The advances in drug delivery systems for designing dosage forms like IRTs for convenient to be manufactured and administered free side effects, and enhance bioavailability[2] so as to achieve better patient compliance.IRT are most commonly formulated when rapid response is required. Super disintegrant is the vital component along with various common excipients like diluents, binder, lubricants, glidant etc used for the preparation of IRT. Immediate release drug delivery[3] is desirable for drugs having long biological half life, high bioavailability, lower clearance and lower elimination half life. For IRT the drug is intended to be released rapidly after administration, or the tablet is dissolved and administered as a solution.IRT tablets are those tablets which are designed to disintegrate[4] and release their medication.

Topiramate[5] is a sulfamate substituted monosaccharide has been approved for use as an antiepileptic agent, as an adjuvant therapy for patients with partial onset seizures or primary generalized tonic-clonic seizures, and for the prevention of migraine. Topiramate blocks voltage-dependent sodium channels, augments the activity of the neurotransmitter gamma amino butyrate at some subtypes of the GABA-A receptor. Absorption of Topiramate is rapid, with peak plasma concentrations occurring at approximately 2 hours. The relative bioavailability of Topiramate from the tablet formulation is about 80% compared to a solution. The average elimination half-life of Topiramate is approximately 22 hours. In the present study IRT of topiramate were designed using wet granulation method using various excipients and crospovidone as natural super disintegrants with prime objective arriving of a cost effective product.

MATERIALS AND METHODS

Materials

Topiramate was gifted by Zydus Cadila, Ahmedabad, and croscarmellose sodium from Dow chemical company. Magnesium stearate, talc, micro crystalline cellulose (Avicel 101, Avicel 102), and potassium dihydrogen-o-phosphate were procured from SD fine chem. Ltd Mumbai. Sodium hydroxide and CCS were procured from Qualigens fine chemicals Mumbai.

Drug excipient studies

Fourier Transform Infrared Spectroscopy (FTIR)

In this method individual samples as well as the mixture of drug and excipients were ground mixed thoroughly with potassium bromide (1:100) for 3-5 mins in a mortar and compressed into disc by applying pressure of 5 tons for 5 mins in hydraulic press. The pellet was kept in the sample holder and scanned from 4000 to 400 cm^{-1} in FTIR spectrophotometer.

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Hypolipidemic activity of parts of *Luffa aegiptiaca* in poloxomer induced hyperlipidemia

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luffa aegiptiaca, hyperlipidemia, poloxamer

ABSTRACT

Cholesterol and lipids are the major class of metabolites that are used to store high energy in the form of fats in the body. They are often stored in specific places in the system and some times misplaced in the bloodstream and other areas leading to metabolic disorders. The elevation in their quantities in serum is often termed as Hyperlipidemia. It affects most the worlds population adversely and is the causative factor for many comorbidities. Usually, medicinal plants exhibit the activities which are mainly due to the chemical constituents in them that are mostly phenols and flavonols. The plant *Luffa aegiptiaca* was investigated for its hyperlipidemic activity in high-fat diet-induced diabetes method. The results showed hyperlipidemic activity by lowering the lipid levels in the serum Four parts of the plant *Luffa aegiptiaca* were investigated for the antihyperlipidemic activity by extracting them with ethanol. These were tested for the lipid reducing property in the rat models induced by poloxamer drug. There was a successful induction of the Hyperlipidemia in the animals. The extracts showed a significant activity int his model. Fruits and leaves showed the best activity compared to other parts.

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INTRODUCTION

Cholesterol and lipids are the major class of metabolites that are used to store high energy int eh form of fats in the body. They are often stored in specific places in the system and some times misplaced in the bloodstream and other areas leading to metabolic disorders. The elevation in their quantities in serum is often termed as Hyperlipidemia. It affects most the worlds population adversely and is the causative factor for many comorbidities [1, 2]. This condition is the primary cause of the increase in the atherogenic index in the people of the world. This was noted to be caused due to various factors that include unhealthy diet, improper lifestyle habits and genetic factors too. High-fat food intake and less exercise and sedentary life also stand as contributing factors for Hyperlipidemia. This will lead to a rise in unhealthy fats like VLDL and cholesterol [3]. This disease is known to cause several other diseases like atherosclerosis, diabetes, congestive heart failure, vasculitis and other endocrine disorders [4]. This will often lead to a permanent disorder or dysfunction of the endocrine system and pancreatitis too.

This is generally fixed by making some alteration in the lifestyle of the patient and by introducing some changes in the diet and dietary supplementation in the food [5]. As we know, numerous drugs treat Hyperlipidemia and related conditions. They are known for their potency, but usually, the course takes a longer duration of use of synthetic medications which usually lead to many other side effects

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Comparison of anti-epileptic property of various parts of Datura

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Keywords:

Datura,
Stramonium,
epilepsy,
convulsions

ABSTRACT

Epilepsy is the most common of the neurological conditions that are widely affecting most of the population around the world. It is a condition on its own and a symptom of other neurological conditions too. It affects almost one per cent of the human population. Many synthetic drugs are produced to treat epilepsy effectively in various mechanisms. Few of them are Barbiturates like phenobarbitone and barbital sodium, hydantoin derivatives like Phenytoin, Sedatives and azepam derivatives like Diazepam etc. Many drugs treat epilepsy but are not devoid of side effects as discussed. So herbs are supporting the system of medicine to treat epilepsy but don't have side effects and adverse effects. There are a lot of herbs that are used to treat the disease on among them is *Datura stromonium*. In this work, the comparison between the antiepileptic property of the different parts of Datura was investigated, which included Flowers, Leaves, Stems and Fruits. The activity was investigated in electrical shock method to induce epilepsy. The brain enzymes were used as estimating parameters. Overall, the flowers showed very less activity compared to stems followed by fruits, and leaves of the plant *Datura stramonium* showed the highest activity.

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INTRODUCTION

Epilepsy is the most common of the neurological conditions that are widely affecting most of the population around the world. It is a condition on its own and a symptom of other neurological conditions too. It affects almost one per cent of the human population [1]. Different mechanisms of the convulsions are reported and investigated a few of them include GABA disturbances and free radicals formation etc. [2]. There are various types of epilepsies they are grand mal epilepsy, tonic-clonic seizures, petit mal epilepsy etc. Other types of convulsions are just symptoms of the major neurological diseases like stroke or any mechanical insult to the brain. Based on the duration of epilepsy and etiology of the convulsions, they are classified accordingly.

Many synthetic drugs are produced to treat epilepsy effectively in various mechanisms. Few of them are Barbiturates like phenobarbitone and barbital sodium, hydantoin derivatives like Phenytoin, Sedatives and azepam derivatives like Diazepam etc. [3]. Even though the drugs are very potent and effective in treating epilepsy, there are also associated side effects with those drugs. The more potent the drugs are, the more toxic they become and more side effects and adverse effects they will have. Few of the side effects include nausea, vomiting, dizziness, ams, confusion, lack of hunger and other psychological symptoms like anger and rage are commonest of the symptoms [4].

The general assertion was that the free radicals that

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Effect of Anti-epileptic Profile of Jatamansi on the Brain Enzymes

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Keywords:

Jatamansi,
Various extracts,
Epilepsy,
Enzymes

ABSTRACT

Seizures are an important and most common disease that affects the human body and are also caused to other neurological manifestations. Most of the people affected in the world currently are middle-aged and are suffering from many brain diseases. 50million people are affected due to epilepsy and convulsions around the world. There are many drugs that helpful and potent against epilepsy. As discussed, they have side effects, and the only solution to avoid those effects is the investigation of herbal sources for their anti-epileptic activity. One of those potent herbs is *Nardostachys jatamansi*. It was investigated and proved for its anti-epileptic property. The current research was planned to compare the effects of different extracts on the anti-epileptic property. In the process, double distilled water, methanol, ethanol and acetone were used as an extraction medium, and the extracts were tested for its property. Out of all the extracts, aqueous and methanol extracts showed a better activity compared with other extracts and standard drug, Diazepam.

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INTRODUCTION

Seizures are an important and most common disease that affects the human body and are also caused to other neurological manifestations. Most of the people affected in the world currently are middle-aged and are suffering from many brain diseases. 50million people are affected due to epilepsy and convulsions around the world [1]. Convulsions cause many physiological changes in the body and the brain. The etiology of the epilepsy being many types like from brain diseases to any physiological stress. This leads to the generation of free radicals in the brain and thereby causing the deterioration and damage to the nervous tissue [2]. Brian produces the antioxidant enzymes to protect itself from the oxidative damage, and those enzymes are the evaluative criteria in most of the cases of the brain damage. Based on the duration of epilepsy and oxidative damage, the levels of the enzyme in the brain changes.

Many drugs treat epilepsy very effectively in various mechanisms. These synthetic drugs treat the disease effectively but contain side effects and adverse effects. Few examples of those drugs like phenytoin and barbiturates have dreadful side effects besides having the potency [3]. They are associated with other activities of those drugs. Those are extreme nausea, vomiting and dizziness, altered mental status, confusion and other psychological effects like excessive rage, reduced hunger and irritability [4].

With a general idea that the free radicals cause brain damage and nervous tissue, brain-protective enzymes are disrupted, and the evaluation of those enzymes enables the estimation of the correlation between those enzymes and epilepsy. It was asserted that the oxidation causes the depletion of the protective enzymes in the brain. These protective enzymes are considerably lowered and are

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Antipyretic Activity of the Root Extracts of *Desmodium gangeticum*

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Keywords:

Desmodium gangeticum,
Pyresis,
yeast method.

ABSTRACT

Fevers are considered as the most important parameters to evaluate and diagnose most of the disease conditions like inflammations, wounds and other infections. There are effective drugs that treat and control the fevers out of which NSAID's are most important ones. They cause notable side effects like gastric ulcers, gastric mucosal perforations etc. which make the use of those drugs limited. Herbs are used to treat various diseases, starting from the evolution of the human race. During this, herbs had been introduced to many types of tests and scientific investigations to prove the activities that herbs possess. The diseases that the herbs are used for are notable in the medical systems like Ayurveda and other systems. The need for the validation of the activities of the herbs and medicinal plants is utmost important these days. The extracts of the plant leaves of Desmodium gangeticum were extracted with ethanol and then investigated for the antipyretic activity in yeast induced pyretic method. The extract was tested in two doses 200 and 400mg/kg. This was found significant when compared to the standard drug.

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INTRODUCTION

Herbs are used to treat various diseases, starting from the evolution of the human race. During this, herbs had been introduced to many types of tests and scientific investigations to prove the activities that herbs possess. The diseases that the herbs are used for are notable in the medical systems like Ayurveda and other systems. The need for the validation of the activities of the herbs and medicinal plants is utmost important these days [1]. Plants offered us a lot of lead molecules till now, and these leads have been used to treat many dangerous diseases that are incurable with synthetic drugs. Few of those diseases have not yet been discovered treated with any synthetic drugs till now. They are CHF and other cancer-related diseases that tend to become dreadful to human beings [2]. So, herbs were considered very important in the treatment of diseases.

Fevers are considered as the most important parameters to evaluate and diagnose most of the disease conditions like inflammations, wounds and other infections. There are effective drugs that treat and control the fevers out of which NSAID's are most important ones. They cause notable side effects like gastric ulcers, gastric mucosal perforations etc. which make the use of those drugs limited [3, 4]. Other selective drugs inhibit COX-II enzyme that is noted to cause the heart and related problems [5, 6]. There also some medications that are causing psychological issues and some neurological problems like medication addiction, bacterial drug resistance in case of infection-related fevers and even dependence of the drugs [7, 8].

The plant *Desmodium gangeticum*, belonging to family Fabaceae was investigated for many activities like inflammatory, analgesic and antioxidant activi-

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Evaluation of anti-pyretic acitivty of *Dracaena sanderiana* by Brewer's yeast method

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Keywords:

Pepper, capsicum, antipyretic, yeast method.

ABSTRACT

These medicinal plants are used to develop a therapy for the disease. To improve the science, investigate the scientific proof and activities validation, therefore the use of various herbal remedies for their pain-relieving and anti-inflammatory action in these current days. Dracaeneaannuum includes cardioprotective influence, anti-inflammatory, anti lithogenic effect, analgesia, thermogenic effects and some beneficial effects on the GI system. Therefore capsaicinoids show the potential value of pain relief, cancer prevention and weight loss. According to these plant effects, consider that this present study was mainly based on to investigate and likely to reduce the fever caused by the Dracaeneaoutdoor and indoor. Chemopreventive potential of capsaicin is evidenced in leave studies. The medicinal plant produces a variety of chemical substances which shows significant therapeutic properties with the standard drug paracetamol.

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INTRODUCTION

These medicinal plants are used to develop a therapy for the disease. To promote the science, investigate the scientific proof and activities validation, therefore the use of various herbal remedies for their pain-relieving and anti-inflammatory action in these current days. Herbal medicines are the main chemical constituents to synthesize drug, which is used for uncertain disease. Diseases such as cancer and heart failure, etc. are depended on herbal choice medicines.

Dracaena sanderiana, which is known as mother in law tongue and lucky bamboo are some tropical plants that are in the forests of the rain forest. They are used as indoor plants that used to give out fresh air by absorbing benzene and other harmful gases. Numerous studies are performed to prove the antioxidant activity of dracaena and the chemical constituents are flavonoids. Since the plant is indoor, it is to test the antipyretic activity of the plant considering that antioxidant will have antipyretic activity too. So two kinds of the plant which are grown indoor and outdoor under direct sunlight are selected for study to prove which has the highest activity [1].

Research method

Plant parts

The *Dracaena sanderiana* indoor and outdoor are carefully obtained in December from the farm and thoroughly dried in the shelter. To dry this, ambient temperature and humidity were used. Powder the extract and sieve through the mesh. Add 100mg powder in soxhlet apparatus along with methanol and measure it. Dry the filtrate and collect semi-solid paste. Therefore, the yield percentage of outdoor is 8.56% (DMI) and fruit percentage was 5.96%(DMO). These two doses are used to check the

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Investigation of antiulcer activity of *Pergularia extensa* Linn

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Keywords:

Pergularia extensa Linn, anti-ulcer activity, Aspirin induced ulcer & Pantoprazole

ABSTRACT

This study was based on the determination of the anti-ulcer activity from methanol extract was prepared by using barks of *Pergularia extensa* linn. Preliminary investigations showed the presence of saponins, terpenes, cardiac glycosides, alkaloids and sterols. Based on OECD-423 Guidelines, the pharmacology and acute oral toxicity studies were conducted by using the methanolic extract. Tannins prevented ulcer development because of their vasoconstriction effects and due to protein precipitation. Similarly, the Methanolic extract of *Pergularia extensa* Linn shows triterpenoids and saponins. The phytoconstituents are present in the extract and these could be possible agents who are involved in preventing gastric lesions induced by Aspirin. When compared to ulcerative control groups, this *Pergularia extensa* Linn. shows a dose-dependent curative ratio. The extracts exhibited an inhibition percentage of 27.18, 45.47 and 61.28 at doses of 100, 200 and 400mg/kg doses respectively.

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INTRODUCTION

The stomach was held in between the oesophagusand the duodenum(small intestine's first part). This is present on the upper side of the abdominal cavity and the top part of the stomach pushes up through the diaphragm. One of this oesophagal sphincter divides the tract above and then the small intestine was divided by the other pyloric sphincter. Parasympathetic, ortho sympathetic plexuses surround the stomach which regulates both activities of its muscle such as secretion. In the newborn human baby, the stomach was available only to retain about 30ml. In several disorders of upper G.I.T., one of the disorder is a peptic ulcer which was partially caused by gastric acid. Patients who are affected by the peptic ulcer disease are involved with a range of symptoms from mild abdominal discomfort to catastrophic perforation and even leads to bleeding [1].

MATERIALS & METHODS

Plant Profile:

Plant name: Pergularia extensa

Family: Asclepiadaceae

PROCEDURE

Determination of LD_{50} values of *Pergularia extensa* linn

The procedure followed was conducted based on OECD guidelines-423. The defined doses were used in this method (5,50,300,2000mg/kg body weight) and the results which may allow classifying the drug dose and toxicity.

To conduct studies, Six animals (Albino mice, 25-75gm) were selected. From Pergularia extensa Linn., the methanolic extracts are given through oral route. In the used animal, most of the crude extracts possess LD_{50} value more than 2000 mg/kg of the body weight. Dose-volume was administered in an animal through the oral route that is about 0.1 ml / 100 gm body weight. Within 3-4 hours, the sign of

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Research Article

DEVELOPMENT AND VALIDATION OF REVERSE PHASE-HIGH-PERFORMANCE LIQUID CHROMATOGRAPHY TECHNIQUE FOR THE CONCOMITANT ASSESSMENT OF OMEPRAZOLE AND PIPERINE IN BULK FORM

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ABSTRACT

Objective: The immense literature study was carried out and disclosed that here no method arrived for the concomitant assessment of omeprazole and piperine in bulk form by using RP-HPLC. Hence, an effort was assembled to arise a easy, specific, precise, reliable, linear, rapid, and validated reverse phase-high-performance liquid chromatography (RP-HPLC) technique for the simultaneous assessment of omeprazole and piperine in bulk form.

Methods: The chromatographic analysis of omeprazole and piperine was performed using a RP-HPLC (WATERS) provided with autosampler and ultraviolet (UV) detector with the software of EMPOWER Version 2. The chosen conditions were isocratic separation with two mobile phase composed of acetonitrile:buffer (phosphate buffer: pH 6.5 ± 0.1) (55:45). Detection was carried out using UV/visible double-beam spectrophotometer at 320 nm. The method was validated as per the ICH guidelines.

Results: The retention time for omeprazole and piperine by proposed HPLC method was found to be 2.767 and 4.029 min, respectively. The correlation coefficients are 0.999. The developed chromatographic method was found to be accurate with recovery 99.2–99.8% and was found within the acceptance criteria (i.e., 98.0–102.0%) with acceptable % relative standard deviation of not >2% at each level.

Conclusion: Thus, the proposed HPLC procedure for the concomitant assessment of omeprazole and piperine was accurate, precise, linear, robust, simple, and economic.

Keywords: Omeprazole, Piperine, Reverse phase-high-performance liquid chromatography, Validation, Simultaneous evalution.

 DOI: http://dx.doi.org/10.22159/ajpcr.2018.v11s4.31718

INTRODUCTION

Omeprazole is a proton-pump inhibitor by apprehension of gastric H+, K+ -ATPase, and in this way, it controls the gastric acid production and omeprazole containing substituted benzimidazole ring in its structure [1-5].

Piperine is a major alkaloid of black pepper, having several pharmacological activities. Along with that, it also enhances the bioavailability of various drugs. Currently, it has been patented as bioavailability enhancer and as an important ingredient of incapacitating composition [6-10].

The immense literature study was carried out and disclosed that here no method arrived for the concomitant assessment of omeprazole and piperine in bulk form by using RP-HPLC. Hence, an effort was made to originate a easy, specific, close, accurate, linear, rapid, and validated high-performance liquid chromatography (HPLC) method for the simultaneous assessment of omeprazole and piperine.

METHODS

Instrumentation

A HPLC (WATERS) equipped with autosampler and ultraviolet detector with the software of EMPOWER Version 2 was used. Complete weighings are done on single pan weighing balance (Shimadzu).

Reagents and standards

Omeprazole and piperine (Fig. 1) standards were obtained from Piramal, India. Analytical grade methanol and acetonitrile were purchased from Merck Specialties Pvt. Ltd., Mumbai. Double-distilled water was used throughout the experiment.

Standard stock solution preparation procedure

To the 10 ml volumetric flask, add 0.1 g of omeprazole and 0.1 g of piperine and 7 ml of mobile phase. The above mixture was sonicated up to become a solution and finally build the solution 10 ml with mobile phase. From the prepared above stock solution (omeprazole and piperine), pipette out 0.3 ml into a 10 ml volumetric flask and thinned out up to 10 ml with similar mobile phase to acquire 30 µg/ml concentration, respectively. The above-prepared stock solutions were filtered across 0.45 µm membrane filter paper using vacuum filter.

RESULTS

Method development

About 20 mL of the standard solution injected into the injector port and calculated the areas (omeprazole and piperine peaks) (Fig. 2).

Optimized chromatographic conditions

Optimized chromatographic conditions were obtained after using mobile phase, acetonitrile:buffer (Phosphate buffer: pH 6.5±0.1) (55:45), by selecting 1 ml/min flow rate and 240 nm detection wavelength. The separation achieved on XTerra RP8 column (4.6 mm×150 mm and 3.5 µm).

Validation of analytical method

Precision

The method precision was performed by intraday precision studies. In the intraday precision studies, five replicated standard solutions were prepared and injected into port, and % relative standard deviation (RSD) and response factor were determined and are reported in Table 1. In the same manner for the interday precision, five replicated