1. Introduction
I am working with R&D center for more than 13 years and taking effort to develop the analytical methods in Pharmaceuticals organization. My development work helps to pharma industry to maintain the quality of products, applies to human being.

The inspiration was through the analytical researches, conducted and assisted the scientists that deliver quick and reliable benefits.

In pharmaceutical industries the quality of products is most important factor, since the product is directly interact with body of human to cure the disease. So purity of drug in pharma products is highly important factor in term of safety.

Each pharmaceutical organization is responsible for protecting the public health by assuring the safety, efficacy, and security of human and veterinary drugs, biological products, medical devices, food supply, cosmetics, and electronic products that emit radiation.

Each pharmaceutical organization believes on “Analytical chemistry” for development of accurate and precise analytical method and applies for analysis of drugs to get more highly accurate result.

Analytical chemistry is the study of the separation, identification, qualification and quantification of the chemical components of natural and artificial materials. Qualitative analysis gives an indication of the identity of the chemical species in the sample and quantitative analysis determines the amount of one or more of these components. Analytical chemistry is also focused on improvements in experimental design and the creation of new measurement tools to provide better chemical information.

Analytical methods development plays important roles in the discovery, development, and manufacture of pharmaceuticals. The official test methods that result from these processes are used by quality control laboratories to ensure the identity, purity, potency, and performance of drug substance.

Analytical chemistry plays an increasingly important role in the pharmaceutical industry where, aside from Quality Assurance, it is used in discovery of new drug candidates and in clinical applications where understanding the interactions between the drug and the patient are critical.

Modern analytical chemistry is dominated by instrumental analysis. Many analytical chemists focus on a single type of instrument.

So as importance of analytical development in pharmaceutical sector, we have decided to perform the research in “Analytical Method Development for Hypertensive Drugs” Also we will use our experience in research of analytical development and try to develop new methods with better selectivity and specificity. New developed methods will help to scientists in industries to release the product regularly and help to students of scientist institute for reference.
Hypertension (High blood pressure)
Hypertension is a cardiac chronic medical condition in which the systemic arterial blood pressure is elevated.

Hypertension (raised blood pressure) is rated by the World Health Organization as one of the main causes of premature death around the globe. At least 970 million people in the world have hypertension disease.

The cause of hypertensive heart disease is chronically elevated blood pressure (BP); however, the causes of elevated BP are diverse. Essential hypertension accounts for 90% of cases of hypertension in adults. Secondary causes of hypertension account for the remaining 10% of cases of chronically elevated BP.

The following is a list of the most common drugs used to treat hypertension

<table>
<thead>
<tr>
<th>Class of Hypertensive drugs</th>
<th>Name of Molecules (Drugs)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diuretics (Water pills)</strong></td>
<td>Chlorthalidone, Hydrochlorothiazide, Acetazolamide, Indapamide, Metolazone, Amiloride hydrochloride, Bumetanide, Ethacrynic acid</td>
</tr>
<tr>
<td><strong>Beta-Blockers</strong></td>
<td>Acebutolol, Atenolol, Betaxolol, Bisoprolol, Carteolol, Carvedilol, Labetalol, Metoprolol, Nadolol, Penbutolol, Propranolol, Timolol</td>
</tr>
<tr>
<td><strong>Calcium Channel Blockers</strong></td>
<td>Amlodipine Besylate, Diltiazem, Felodipine, Isradipine, Nicardipine, Nifedipine, Nisoldipine, Verapamil hydrochloride</td>
</tr>
<tr>
<td><strong>Angiotensin converting enzyme inhibitors</strong></td>
<td>Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril, Quinapril, Ramipril, Trandolapril</td>
</tr>
<tr>
<td><strong>Angiotensin II receptor blocker</strong></td>
<td>Candesartan, Irbesartan, Losartan, Telmisartan, Valsartan, Olmesartan Medoxomil</td>
</tr>
<tr>
<td><strong>Statins</strong></td>
<td>Atorvastatin, Fluvastatin, Lovastatin, Pravastatin, Rosuvastatin, Simvastatin</td>
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</table>
In today’s growing life style, the hypertension major disease, which attracts to researches to serious focus on research related to antihypertensive drugs.

So we have selected the hypertensive drug category for method development study. Mainly hypertensive drugs are available in single dosage form and combined dosage form. There are many analytical methods are available for the antihypertensive dosage either contain as a single active component or in combination of two/ three active drugs. However, as per the literature search no single method is available for simultaneous determination of more than three active components.

Therefore, the goal is decided to develop and validate the single analytical method for simultaneous determination of anti-hypertensive class that includes most of the anti-hypertensive drugs,