A method to determine 9 penicillin residues in milk and milk powder by high performance liquid chromatography tandem mass spectrometry (HPLC-MS/MS) was established. Samples were extracted by acetonitrile-water, cleaned by solid-phase extension detected by HPLC-MS/MS and quantified by external std. method. The detection limit was 1 mg/kg for ampicillin and nafcillin, 2 mg/kg for amoxicillin, piperacillin, penicillin G, penicillin V and cloxacillin, 4 mg/kg for oxacillin and dicloxacillin in milk, and was 8 mg/kg for ampicillin and nafcillin, 16 mg/kg for amoxicillin, piperacillin, penicillin G, penicillin V and cloxacillin, 32 mg/kg for oxacillin and dicloxacillin in milk powder, respectively.

A quantitative method for the determination of seven penicillins in bovine plasma and veterinary drugs has been developed. Amoxicillin (AMO), ampicillin (AMP), penicillin G (PENG), penicillin V (PENV), oxacillin (OXA), cloxacillin (CLO), and dicloxacillin (DICLO) were separated on a Prefectsil ODS-2 (250 × 4 mm, 5 mm) column, using gradient elution, with a mobile phase of 0.1% vol./vol. TFA and ACN-methanol (90:10 vol./vol.). PDA detection was used at 240 nm.

A high-performance liquid chromatography (HPLC) method for simultaneously assaying of amoxicillin and dicloxacillin incapsules was established by Hong. et al. The separation was performed on a Shimadzu VP-ODS column (250 mm × 4.6 mm). The mobile phase was 0.008 mol/L sodium dodecyl sulfate (adjusted with phosphoric acid to pH 4.5)-methanol (68:32). The detection wavelength was 225 nm, and flow rate was 1 mL/min.

Sorensen. et al. developed an HPLC method for determination of amoxicillin, penicillin G, penicillin V, ampicillin, oxacillin, cloxacillin, nafcillin and dicloxacillin in serum from pigs and cattle. Serum was cleaned up by solid-phase extraction (SPE), ultra-filtered and derivatized. The method was linear in the range tested up to 2000 ng mL-1 of individual penicillins in serum.

A simple HPLC procedure was described for the determination of amoxicillin, ampicillin, cloxacillin, dicloxacillin, flucloxacillin and phenoxyethylpenicillin (penicillin V) in single or
combined pharmaceutical formulations\textsuperscript{12}. The drugs were chromatographed on an Ultrasphere ODS column and (40% methanol contg. 9 mM-sodium heptanesulfonate, 30 mM-potassium dihydrogen phosphate and 0.04% triethylamine) adjusted to pH 5 with 1M-phosphoric acid as mobile phase using penicillin G as internal standard.

A rapid, specific, sensitive and simple high performance liq. chromatography was developed for simultaneous estimation of rosuvastatin calcium and fenofibrate in tablet formulation\textsuperscript{14}. The separation was achieved by phenomenex C18 column (250 ×4.6 mm, particle size 5 mm) with a mobile phase consisting of methanol:0.02 M ammonium di hydrogen phosphate buffer (75:25 vol./vol., pH 5.5 adjusted with ortho phosphoric acid), at a flow rate of 1.0 mL/min.

Rosuvastatin-fenofibrate combination is widely used in the treatment of hypercholesterolemia and hypertriglyceridemia\textsuperscript{15}. A new, simple, and sensitive spectrophotometric method in UV region was developed for the determination of rosuvastatin calcium and fenofibrate in bulk and in pharmaceutical formulations. The drug obeyed the Beer's law [for rosuvastatin concn. range 1-10 mg/mL and for fenofibrate concn. range 2-20 mg/mL] and showed good correlation.

TLC methods for fast detection of lipid-regulating agents, antihypertensive agents, anti-tussive and antiasthmatic agents in herbal remedies simultaneously were established\textsuperscript{16}. The sample was extracted with methanol and separated by TLC plates pre-coated with silica gel GF254 as stationary phase. Lipid regulating agents were eluted with the mobile phase consisting of n-hexane-Et acetate-diethyl ether-glacial acetic acid (10:8:2:1), detected at UV 254 nm and stained with 5% vanillin sulfuric acid soln. Antihypertensive agents were eluted with the mobile phase consisting of Ethyl acetatemethanol-diethylamine (40:0.5:3) and examined at UV 254 nm and UV 365 nm.

A simple, sensitive, precise, and specific reversed phase high performance liquid chromatography method was developed and validated for the determination of finasteride and tamsulosin in bulk and tablet dosage forms\textsuperscript{17}. It was found that the excipient in the tablet dosage
forms does not interfere in the quantification of active drug by proposed method. The HPLC separation was carried out by reverse phase chromatography on Shimadzu HPLC, 10-At detector with hypersil ODS C18 Column 250 × 4.6mm (particle size of 5 m) and constant flow pump. Rheodyne injector with 20 ml loop with a mobile phase composed in the ratio acetonitrile: (0.05M) KH2PO4 buffer (45:55) at flow rate 1.8 mL/min.

A specific, rapid and simple UV spectrophotometric method with good sensitivity was developed and validated for the simultaneous determination of finasteride and tamsulosin in standard solutions and tablets. In methanol, the lmax of finasteride and tamsulosin was found to be 219 and 224 nm resp. Using an Elico UV-Visible spectrophotometer with matched quartz cells, in this proposed method both these drugs obeyed linearity individually and in mixture with the concentration range of 12.5-62.5 mg/mL for finasteride and 1-5 mg/mL for tamsulosin with a correlation coeff. of 0.9981 and 0.9989.

The attempt was made to develop analytical UV-visible spectroscopic method for determination of tamsulosin hydrochloride and finasteride combined tablet dosage form. The fixed dose combination tablets contents tamsulosin hydrochloride & finasteride are used to treat the symptoms of an enlarged prostate, a condition technique known as benign prostatic hyperplasia. The solvent used for determination is methanol.

A new simple, precise, accurate and selective TLC-densitometry method has been developed for simultaneous determination of tamsulosin hydrochloride and finasteride in tablet dosage form. Chromatographic separation was performed on aluminum plate precoated with silica gel 60 F254 using toluene: n-propanol: triethylamine (3.0:1.5:0.2 vol./vol.) as mobile phase. Detection was carried out densitometrically at 260 nm.

Simple, accurate, precise, and sensitive UV spectrophotometric and stability indicating reversed phase high performance liquid chromatographic methods for simultaneous estimation of tamsulosin and finasteride in combined tablet dosage form were developed and validated. The spectroscopic method employs an absorbance correction method using 228 and 246 nm as two
wavelengths for estimation with methanol as solvent. Beer's law is obeyed in the concn. range of 2-10 and 25-125mg/mL for Tamsulosin and Finasteride respectively.

Reversed-phase HPLC (RP-HPLC) and thin-layer chromatog. (TLC) methods have been developed and validated for simultaneous estimation of tamsulosin hydrochloride and finasteride in bulk drug and in combined dosage forms. RP-HPLC separation was achieved on a Phenomenex C18 column using methanol/0.02 mol/L-1 ammonium acetate buffer/triethylamine(79.9+20+0.1, vol./vol./v.) (pH 9.2) as mobile phase. TLC separation was achieved on an aluminum-backed layer of silica gel60 F254 using toluene/methanol/triethylamine (9+1.5+1, vol./vol./v.) as eluent.

The title compound sustained-release capsule comprises: tamsulosin 0.01-10%, finasteride 0.1-20%, sustained-release adjuvant 60-97%, and other adjuvant 0-10%. Tamsulosin can be hydrochloride, hydroiodide, hydrobromide and fumarate of tamsulosin. Sustained-release matrix can be hydrophilic matrix(Me cellulose, hydroxymethyl cellulose, hydroxyethylcellulose, hydroxypropyl cellulose, hydroxypropylmethyl cellulose, carboxyethyl cellulose, PVP, carbomer, etc.), erodible matrix (hydrogenated vegetable oil, glyceryl monostearate, animal fat, beeswax, stearyl alc., etc.), water-insol. matrix (Etcellulose, polyethylene, polychloroethylene, ethylene-vinyl acetate copolymer).

A simple, fast and precise reversed phase high performance liquid chromatography method is developed for the simultaneous determination of diloxanide furoate and tinidazole using metronidazole as an internal standard. Chromatographic separation of the 2 drugs was performed on an inertsil C18 column (250 mm × 4.6 mm, 5 mm) as stationary phase with a mobile phase comprising of 0.1% ortho phosphoric acid:acetonitrile (40:60 vol./vol.), at a flow rate of 0.8 mL/min-1 and UV detection at 215nm.

A simple, precise, rapid, and selective high-performance thin-layer chromatography (HPTLC) method was developed for the simultaneous determination of diloxanide furoate and tinidazole in tablets. Samples were sepd. on aluminum-backed plates coated with 0.2-mm layers of silica gel.
60F254, with CH2Cl2-MeOH (9.6:0.25) as mobile phase. UV-detection at 1 280nm was performed densitometrically.

Dicyclomine was determined in the presence of tinidazole and diloxanide furoate by treatment with pH 1.2 potassium dichromate solution and measurement of the absorbances at 357 nm. Beer's law held for 0-400 mg/mL.26

Tinidazole (I) and diloxanide furoate (II) were determined in combined pharmaceuticals by using a double beam high-speed scanning spectrophotometer and measuring I and II at 310 and 254 nm, resp.27 The method is simple and convenient. The recovery and relative standard deviation were 96.8-99.8% and 0.1-0.4 (for I) and 0.2-0.4% (for II), respectively.

A HPLC method for the simultaneous estimation of tinidazole and diloxanide furoate uses a micro Bondapak C18 column, MeOH-0.05M H3PO4 (8:3) mobile phase and detection at 254 nm.28 Both tinidazole and diloxanide furoate gave linear responses from 0.2-8.0 and 0.12-5.0 mg, resp., for the 2 drugs. The proposed method gave results comparable to those obtained by standard methods.

Two spectrophotometric methods were developed for the simultaneous determination of diloxanide furoate and tinidazole in combined dosage formulations without prior separation.29 The 1st method was based on the measurement of the absorbance of a methanolic soln. of the sample at 259 and 311 nm and application of a simplified Vierordt equation for the determination of diloxanide furoate, whereas tinidazole was determined by direct spectrophotometry.

A simple reverse phase liquid chromatographic method has been developed and subsequently validated for simultaneous determination of tinidazole and diloxanide furoate.30 The separation was carried out using a mobile phase consisting of acetonitrile, methanol and 0.2 M potassium dihydrogen phosphate (pH 5) in the ratio 2:3:2. The column used was SS Wakosil-II C-18 with a flow rate of 1 ml/min and UV detection at 282 nm.
A new simple, precise, economically viable and efficient High Performance Liquid Chromatography (HPLC) method for the estimation of Methylcobalamin (MeB12) in bulk drugs and pharmaceutical dosage formulations was developed and validated. The method was developed without the use of solid buffers and it was found that the solvent system in the ratio of 20:80 (vol./vol.) Methanol: Water was given high resolution chromatogram with low Tailing factor.

Mixed dyslipidemia, oxidative stress and inflammation are related to a high risk for cardiovascular events. The aim of this open-label randomized study was to compare the effects of high-dose rosuvastatin, low-doserosuvastatin plus fenofibrate and low-dose rosuvastatin plus omega 3 fatty acids on inflammation and oxidative stress indexes in patients with mixed dyslipidemia. Methods: Ninety patients with mixed dyslipidemia participated in the study.

In this study, a polyclonal antibody with high avidity and specificity to the potent hypocholesterolemic agentrosuvastatin (ROS) has been prepared and used in the development of highly sensitive ELISA for determination of ROS in plasma. ROS was coupled to keyhole limpet hemocyanin (KLH) and bovine serum albumin (BSA) using carbodiimidereagent. ROS-KLH conjugate was used for immunization of female 8-wk old New Zealand white rabbits.

The invention relates to a synergistic pharmaceutical formulation for preventing and/or treating cardiovascular and cerebrovascular diseases. The synergistic pharmaceutical formulation contains 5-150 mg of clopidogrel or its derivative (preferably clopidogrel bisulfate, clopidogrel besylate or clopidogrel hydrochloride), 1.25-120 mg of statins (including simvastatin, lovastatin, atorvastatin, and rosuvastatin), and 25-1,000 mg of fibrates (including fenofibrate, gemfibrozil, clofibrate, clinofibrate, ciprofibrate, bezafibrate, and etofibrate).

A review. Mixed dyslipidemia, characterized by a lipid triad of elevated triglycerides (TG), elevated low-d. lipoproteincholesterol(LDL-C) and reduced high. lipoprotein-cholesterol (HDL-
C), is a common and frequently difficult to manage condition\textsuperscript{35}. The use of combination medications is often needed to effectively treat the lipid triad.

The title compound contains chemical combination of lipid-lowering drugs fenofibrate and nitric oxide donor drugs and one kind of HMG-CoA reductase inhibitor as active ingredient, and pharmaceutically acceptable adjuvants\textsuperscript{36}.

Instability and safety of concomitant fenofibrate (I) and statin (II) treatment were investigated for 24 mo in 24 type 2 diabetic patients whose lipid control by single I or II treatment was insufficient\textsuperscript{37}. By concomitant treatment, total cholesterol (TC) and neutral fat (TG) significantly decreased, HDL cholesterol significantly increased, and arteriosclerosis index was prominently improved.

This invention relates to choline salt of the medicine for lowering blood lipid, its preparation and medical application\textsuperscript{38}. The medicine for lowering blood lipid comprises clofibrate, lifibrate, fenofibrate, ciprofibrate, gemfibrozil, acipimox, nicotinic acid, lovastatin, simvastatin, pravastatin, fluvastatin, atorvastatin, rosuvastatin, pitavastatin, eicosapentaenoic acid (EPA), docosahexenoic acid (DHA), etc.

TLC methods for fast detection of lipid-regulating agents, antihypertensive agents, anti-tussive and antiasthmatic agents in herbal remedies simultaneously were established\textsuperscript{39}. The sample was extracted with methanol and separated by TLC plates pre-coated with silica gel GF254 as stationary phase. Lipid regulating agents were eluted with the mobile phase consisting of n-hexane-Et acetate-diethyl ether-glacial acetic acid (10:8:2:1), determined at UV 254 nm and stained with 5\% vanillin sulfuric acid solution.