(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :20/03/2015

(21) Application No.761/DEL/2015 A
(43) Publication Date : 14/04/2017

(54) Title of the invention : IMPROVED ORAL FORMULATION OF ROSUVASTATIN NANOCRYSTALS WITH ENHANCED BIOAVAILABILITY AND METHOD THEREOF

(51) International classification :A61K9/16
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)CHITKARA UNIVERSITY
Address of Applicant :CHITKARA UNIVERSITY Chandigarh-Patiala National Highway(NH-64) Tehsil Rajpura, Distt. Patiala Punjab India Punjab India
(72)**Name of Inventor :**
1)SHARMA ARVIND
2)DR CHITKARA MANSI
3)DR SANDHU INDERJEET SINGH
4)DR ARORA SANDEEP

(57) Abstract :
The present invention discloses an improved nanoform of Rosuvastatin (RVT) with enhanced bioavailability suitable for formulation of oral solid dosage forms such as tablets or capsules and a simple method for its preparation. In-vivo testing revealed that maximum peak concentration of nano RVT in plasma (Cmax) was approximately 10 fold greater than that of commercial tablet. Area under curve or AUC (plasma drug concentration vs time) of oral administered drug over 24 hour period, was approximately 9 fold greater than commercial tablet. Method of preparation of the nanoform involves dissolving RVT in organic solvents; adding water to obtain precipitate; removing solvent by stirring; centrifugation to obtain supernatant and freeze-drying at -40º C for 24 hours to obtain nanocrystals in powder form. The powder can be used to make improve oral formulations e.g. tablets of RVT with enhanced bio-availability.

No. of Pages : 10 No. of Claims : 4