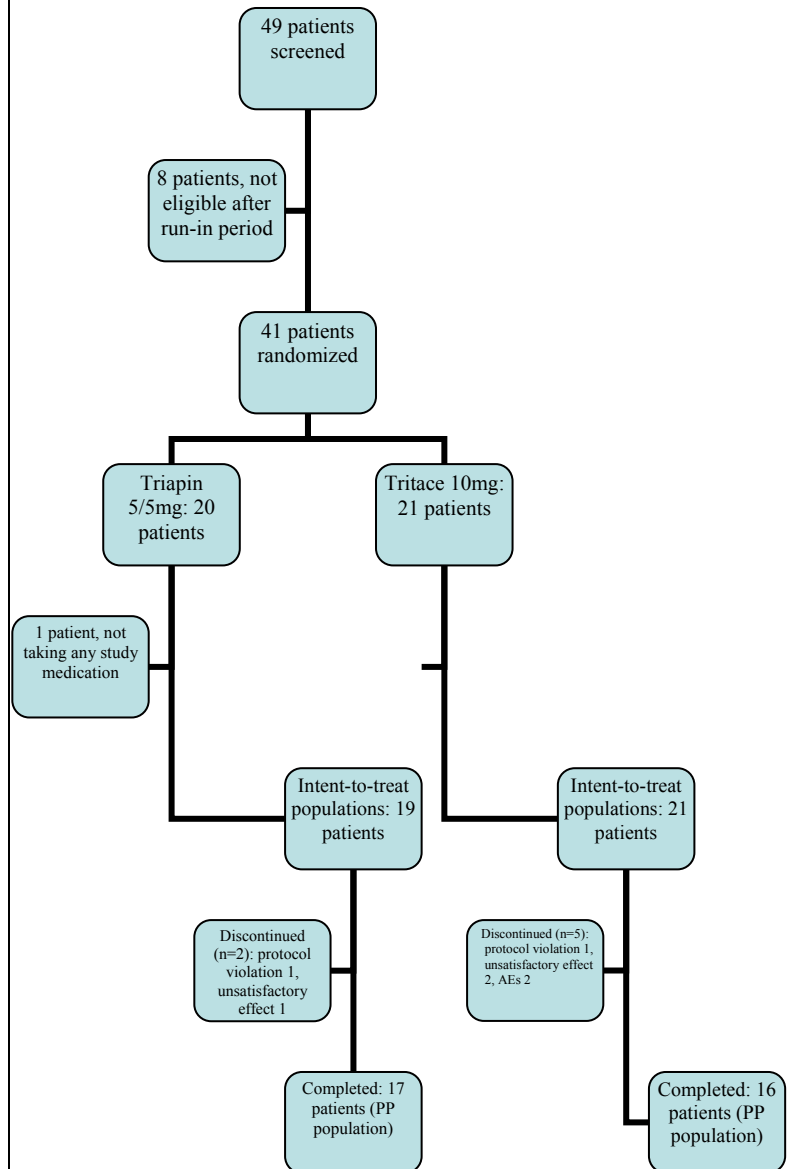


<p><i>These results are supplied for informational purposes only.</i></p> <p><i>Prescribing decisions should be made based on the approved package insert in the country of prescription</i></p>			
<b>Sponsor/company:</b>	sanofi-aventis	<b>ClinialTrials.gov Identifier:</b>	NCT00841880
<b>Generic drug name:</b>	Ramipril + Felodipine	<b>Study Code:</b>	RAMFE_L_03420
		<b>Date:</b>	24 August 2010

<b>Title of the study:</b>	A Prospective, Open Label, Randomized, Comparative Study of Ramipril 5mg plus Felodipine 5mg Combined Regimen and Ramipril 10mg in Uncontrolled Hypertensive Patients		
<b>Investigator(s):</b>	PI: Dr. Chung-Hsiang Liu Department of Internal Medicine China Medical University Hospital Taichung, Taiwan		
<b>Study center(s):</b>	China Medical University Hospital		
<b>Publications (reference):</b>	1. Clin Exp Hyperts 1999; 21: 1447-1462. 2. Br J Pharmac 1993; 36: 323-330. 3. Int J Clin Pract 2006; 60(3): 265-274.		
<b>Study period:</b> Date first patient/subject enrolled: 21-Jan-2009 Date last patient/subject completed: 07-Sep-2009	<b>Phase of development:</b> IV		
<b>Objectives:</b>	<p>Primary Objective</p> <ul style="list-style-type: none"> <li>➤ To compare the reduction in SBP following a 8-week regimen of ramipril 5mg plus felodipine 5mg versus ramipril 10mg</li> </ul> <p>Secondary Objectives</p> <ul style="list-style-type: none"> <li>➤ To compare the response rate (defined as office seated SBP/DBP reduction of more than 10mmHg from baseline), and BP controlled rate on SBP or DBP or both (defined as SBP &lt; 140 mmHg and / or DBP &lt; 90 mmHg, and as SBP &lt; 130 mmHg and / or DBP &lt; 80 mmHg in diabetes, chronic kidney disease, known CAD or CAD equivalent, or 10-year Framingham risk score &gt; 10%).</li> <li>➤ To ascertain the safety and tolerability of ramipril/ felodipine versus ramipril in Taiwanese population.</li> </ul> <p>To compare compliance with fixed dose combination of ramipril/felodipine versus ramipril treatment.</p>		
<b>Methodology:</b>	A prospective, open-label, randomized, active-controlled, parallel group study		
<b>Number of subjects:</b>	Planned: 60 (49 subjects were screened)	Randomized: 41	Treated: 40
<b>Evaluated:</b>	Efficacy: 40	Safety: 40	

49 patients were enrolled into a 2-week run-in phase with ramipril 5mg treatment. After run-in period, 41 patients met the entry criteria and were randomly allocated to receive Triapin® 5/5mg (N=20) or Tritace® 10mg (N=21). One patient in Triapin® group, not taking any study medication, was excluded from ITT population . 7 subjects (2 in Triapin® group, 5 in the Tritace® group) from ITT populations were excluded from the PP population due to protocol violations or early withdrawals.



<p><b>Diagnosis and criteria for inclusion:</b></p>	<p><u>Inclusion criteria:</u></p> <ul style="list-style-type: none"> <li>• Male or female outpatients aged &gt; 20 years</li> <li>• Uncontrolled essential hypertension defined by office SBP/DBP &gt; 140/90 or &gt; 130/80 mmHg with co morbidities or risk factors (diabetes mellitus, chronic kidney disease, known CAD, CAD equivalent or 10-year Framingham risk score &gt; 10%)</li> <li>• Patients must be previously untreated or treated only with a single antihypertensive therapy at usual dose for at least 4 weeks</li> <li>• Patient or legally acceptable representative have signed the written informed consent form</li> </ul> <p><u>Exclusion criteria:</u></p> <ul style="list-style-type: none"> <li>• Females: who are pregnant or breast feeding or of childbearing age without an effective contraception</li> <li>• Office diastolic BP &gt; 110 mmHg or office systolic BP &gt; 180 mmHg</li> <li>• Hypersensitivity to ramipril, felodipine or to any of the excipients</li> <li>• Bilateral stenosis of the renal arteries, or unilateral stenosis in the single kidney</li> <li>• History of intolerance to any ACE inhibitor</li> <li>• History of significant renal diseases including: serum creatinine &gt; 3.0 mg/dl, or creatinine clearance &lt; 30 ml/min.</li> <li>• History of hereditary and/or idiopathic angioedema; or angioedema associated with previous ACEI.</li> <li>• Significant cardiovascular disease, multiple drug allergies, bronchospastic disease or other malignancies requiring current medication</li> <li>• Hepatic disease as indicated by any of the following : ALT or AST &gt; 3 x upper limit of normal, or serum bilirubin &gt; 2 x upper limit of normal</li> <li>• Any other condition or therapy that, in the investigator's opinion, or as indicated in the product(s) label, may pose a risk to the patient or interfere with the study objective</li> <li>• Any other investigational drug given within 30 days of initiation of therapy, and participation in other clinical studies while enrolled in this protocol.</li> </ul>
<p><b>Investigational product:</b></p> <p>Dose:</p> <p>Administration:</p>	<p>Triapin ® 5/5 mg</p> <p>1 tablet per day, which contains 5 mg felodipine and 5 mg ramipril per tab</p> <p>Orally</p>
<p><b>Duration of treatment:</b> 8 weeks</p>	<p><b>Duration of observation:</b> 8 weeks</p>

<p><b>Reference therapy:</b> Dose: Administration:</p>	<p>Ramipril (Tritace®) 10mg qd orally</p>
<p><b>Criteria for evaluation:</b>  <b>Efficacy</b></p>	<p><u>Primary:</u></p> <ul style="list-style-type: none"> <li>➤ The change in mean SBP (<math>\Delta</math> SBP) at office between the initial state (at visit 2, randomization) and at the end of the study (at visit 4, week 8). (<math>\Delta</math> SBP = SBP w0 - SBP w8)</li> </ul> <p><u>Secondary:</u></p> <ul style="list-style-type: none"> <li>➤ Office DBP measurement at baseline and after 8-week treatment</li> <li>➤ Office SBP and DBP measurements after 4-week treatment</li> <li>➤ Percentage of responders after 4 and 8-week of treatment <ul style="list-style-type: none"> <li>– Responders: defined as SBP/DBP reduced &gt; 10mmHg from baseline (at visit 2)</li> </ul> </li> <li>➤ Percentage of normalized patients after 4 and 8-week of treatment <ul style="list-style-type: none"> <li>– normalized : defined as mean sitting BP &lt; 140/90 mmHg, and as &lt; 130/80 mmHg in patients with compelling indications (DM, CKD, CAD pts or 10-yrs Framingham risk score &gt; 10%)</li> </ul> </li> <li>➤ Compliance was assessed using pill count at week 8</li> </ul>
<p><b>Safety:</b></p>	<p>The criteria for evaluation of safety include treatment-emergent reported or observed adverse events and laboratory tests.</p>
<p><b>Statistical methods:</b></p>	<ul style="list-style-type: none"> <li>■ Demography and baseline characteristics: descriptive statistics were used for continuous variables and frequency tables were provided for categorical data.</li> <li>■ All efficacy analyses were performed on an intent-to-treat (ITT) basis, defined as subjects who received at least one dose of a randomized study drug and had baseline assessment.</li> <li>■ Primary efficacy endpoint: mean change in office BP from randomization to week 8 was compared between the two treatment groups using Wilcoxon Rank-Sum Test.</li> <li>■ Secondary efficacy endpoints: Continuous variables were compared by Wilcoxon Rank-Sum Test, category variables were compared by Fisher's Exact Test.</li> <li>■ P values were 2-tailed and considered significantly if <math>p &lt; 0.05</math>.</li> </ul>

<p><b>Summary of efficacy results:</b></p>	<ul style="list-style-type: none"> <li>➤ Patients with uncontrolled hypertension were randomized to receive either Triapin 5/5mg (n=20) or Tritace 10mg (n=21) over an 8 week treatment period. All demographic and clinical characteristics were well balanced between groups. At randomization, mean sitting SBP/DBP were 146.5/92.1 mmHg in Triapin group and 146.8/90.9 mmHg in Tritace group.</li> <li>➤ Primary endpoint assessment showed a similar SBP reduction with Triapin (-9.6 ± 14.33 mmHg) as compared with Tritace (-2.3 ± 12.15 mmHg) at week 8 (p=0.146).</li> <li>➤ ITT analysis found that the decrease in mean DBP was significantly greater with Triapin group compared with Tritace group (-4.3 ± 7.76 vs 0.8 ± 8.88 mmHg; p=0.038 )</li> <li>➤ After 4 weeks of treatment, decreases in SBP/DBP were noted in both treatment groups. However, a statistically significant decrease from baseline was achieved only by Triapin (p &lt;0.05) after 8 weeks of treatment.</li> <li>➤ Higher percentage of the patients in Triapin group were classified as responders (47% vs 19% in Tritace group, p=0.091). At week 8, 66.7% of patients treated by Triapin and 52.9% in the Tritace group had normalized SBP; while the proportion of patients achieved DBP normalization were 61.1% and 41.2% in Triapin and Tritace group respectively.</li> <li>➤ Treatment compliance rates were similar in each treatment arm (95.1± 17.57% vs 84.7 ± 25.03 %; Triapin vs Tritace, p=0.079)</li> </ul>
<p><b>Safety results:</b></p>	<p>There were 34 TEAEs reported, 13 in Triapin group and 21 in Tritace group. Majority of the TEAEs reported were mild to moderate in degree. Drug-related AEs from the study occurred more frequently in Tritace group (Triapin vs Tritace: 20% vs 38%, p= 0.306). This higher incidence of drug-related AEs in Tritace group was due to higher incidence of cough, compared with Triapin group. No SAE was reported during the study period.</p>
<p><b>Date of report:</b></p>	<p>02-Feb-2009</p>