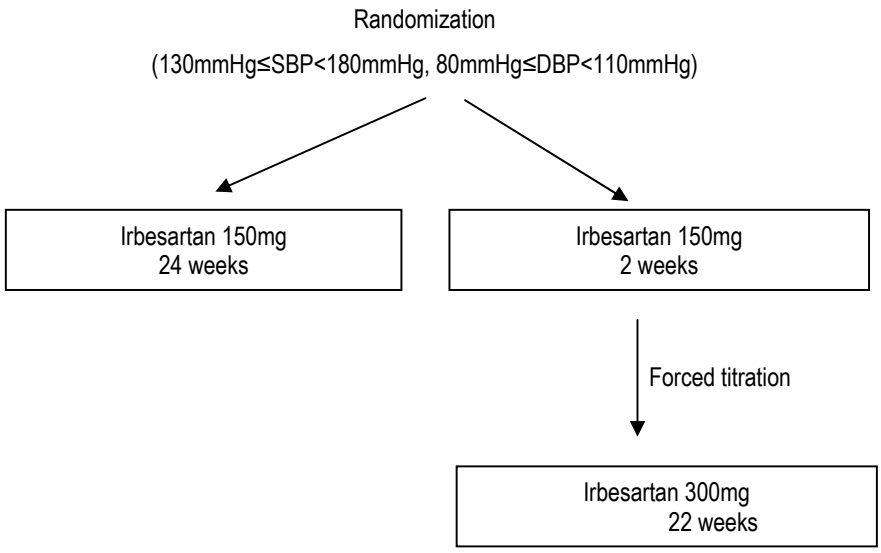
These results are supplied for informational purposes only. *Prescribing decisions should be made based on the approved package insert in the country of prescription*			
Sponsor/company:	sanofi-aventis	**ClinicalTrials.gov Identifier:**	NCT00334581
		Study Code:	IRBES_L_00907
Generic drug name:	Irbesartan	**Date:**	22 June 2009

Title of the study:	A study of irbesartan 150mg versus 300mg in Chinese hypertensive patients with type 2 diabetes and microalbuminuria. Study Number: IRBES_L_00907		
Investigator(s):	Prof. Ning Guang Department of Endocrinology, Ruijin Hospital affiliated to Medical college of Shanghai Jiaotong University, Shanghai 200025, China		
Study center(s):	10 centers, China		
Publications (reference):			
Study period: Date first patient/subject enrolled: 19-05-2006 Date last patient/subject completed: 20-06-2008		Phase of development: Phase IV	
Objectives:	To evaluate the efficacy of irbesartan 150mg versus 300mg on Urine Albumin Excretion Rate(UAER) in Chinese hypertensive type 2 diabetes patients with microalbuminuria.		
Methodology:	This is a multi-center, randomized, open, 24 weeks trial of irbesartan 150mg versus 300mg to evaluate the efficacy on UAER in Chinese hypertensive type 2 diabetes patients with microalbuminuria.		
Number of patients/subjects:	Planned: 200	Randomized: 191	Treated:190
Evaluated:	Efficacy / Pharmacodynamics:	Safety: 190	Pharmacokinetics: NA
	Efficacy: Intent-to-treat (ITT) Population: 190 patients Per-protocol (PP) Population [patients enrolled according to inclusion / exclusion criteria and completing the 24 week treatment period]: 172 patients Drop out:19 patients(15pts treated with Irbesartan 300mg, 4pts with 150mg. Reason:AE-9pts(7 pts on 300mg and 2 pts on 150mg), missed follow up-3pts(3 pts on 300mg), withdrew consent form-1pts(1 pts on 300mg) , lack of efficacy-2pts(1 pts on 300mg and 1 pts on 150mg), protocol deviation-1pts(1 pts on 300mg), other-3pts(2 pts on 300mg and 1 pts on 150mg)) Safety population: 190 patients		

Diagnosis and criteria for inclusion:	Enrolled patients aged between 25 to 75 years old; With blood pressure criteria of 130mmHg≤SBP<180mmHg, 80mmHg≤DBP<110mmHg; UAER: 30-300mg/24h; Diagnosed type 2 diabetes patients; Male: serum creatinine< 1.5mg/dl, female: serum creatinine<1.4mg/dl; BMI: 18-30kg/m^2; Serum Potassium: 3.5-5.5 mmol/l; All the patients informed consent forms were obtained. Allowed medications include antihypertensive except ARB/ACEI. Patients who took ARB/ACEI within two weeks prior to the study could not be enrolled.
Investigational product: Dose: Administration:	Irbesartan  Oral
Duration of treatment: 24 Weeks	Duration of observation: 24 weeks after first dose of study medication
Reference therapy:	NA
Criteria for evaluation:	
Efficacy: Or Pharmacodynamics:	Efficacy Primary endpoint: Difference in UAER change at week 24 between two groups. At baseline, at week 12 and week 24, the UAER was recorded twice on consecutive days and the mean recorded. Secondary endpoints: Change in SBP&DBP at week 24; Proportion of patients returning to normoalbuminuria at week 24.

Safety:	Adverse events reported by the patient or noted by the investigator, Standard hematology and blood chemistry, vital signs, physical examination during the follow up period.
Pharmacokinetics:	NA
Pharmacokinetic sampling times and bioanalytical methods:	NA
Statistical methods:	- Analyze the difference of UAER change at week 24 between two groups - Analyze the normalization rate of UAER at week 24 between two groups - Analyze blood pressure change at week 24 between two groups T test, Chi-square test or logrank test were used. All the statistical analyses were done with SAS software (version 9.13).

Summary:

ITT population baseline characteristic:

	Irbesartan 150mg/d	Irbesartan 300mg/d	*P* value
	(n=94)	(n=96)	
Male，n（%）	50 (53.2)	54 (56.3)	0.67
Age	60.8±9.4	61.4±8.1	0.64
Weight（kg）	67.8±10.7	69.9±10.5	0.19
BMI（kg/m2）	25.1±2.5	25.7±2.8	0.11
SBP（mmHg）	141.8±12.7	144.8±11.6	0.09
DBP（mmHg）	82.0±8.1	82.5±9.0	0.66
UAER，mg / 24h	77.6（67.6-87.1）	91.2（81.3-104.7	0.06
Creatinine(umol/l)	77.5±20.4	79.7±21.4	0.47
HbA1c(%)	7.0±0.8	7.1±0.8	0.42
Beta-Blocker,n(%)	20(21.3)	11(11.5)	0.07
CCB, n(%)	54(57.5)	50(52.1)	0.46
Diuretic, n(%)	5(5.32)	6(6.25)	0.78

In this study, the difference in baseline UAER between the Irbesartan 300mg group and the 150mg group approached statistical significance (p=0.06; 91.2 vs. 77.6 mg/24h).

Efficacy results: or Pharmacodynamic results:	(1) UAER of Irbesartan 300mg and 150mg arms were decreased after 24 weeks (UAER change rate from baseline: 11.9% vs. 11.0%) of treatment, but there was not statistical difference between two arms (P≧0.82 at week 24). (2) Baseline SBP/ DBP mean values for 300mg and 150mg arms were 144.8/ 82.5 and 141.8/ 82.0mmHg respectively (P=0.09 and p=0.66 respectively). Irbesartan 300mg arm showed stronger BP lowering efficacy than Irbesartan 150mg arm. After 24 weeks of treatment, the SBP reduction (17.0 vs.11.4mmHg, P<0.02) and DBP reduction (9.2 vs. 5.2mmHg, P<0.02) of Irbesartan 300mg vs.150mg arm were statistically significant (3) There was no statistical difference between Irbesartan 300mg and 150 mg arms (20.7% vs. 28.9%, P=0.22) in the proportion of patients returning to normoalbuminuria at week 24.

Safety results:

A total of 92 adverse events were reported by 463 patients. Adverse events occurring in more than two patients were as following:

AE	Total Patient number	Irbesartan 300	Irbesartan 150
Dizziness	13	10	3
Lower limbs edema	6	4	2
Urethritis	4	1	3
Common cold	4	2	2
Hyperkalemia	2	2	0
Atrial Fibrillation	2	1	1
Dyspepsia	2	0	2
Hyperlipidemia	2	0	2

Of 92 adverse events, 7 events were confirmed as serious adverse events and all happened in patients treated with Irbesartan 300mg.

SAE
surgical removal of breast tumour
stroke
hypertension
dizziness
dyspnea
Cholecyst concretion
ocular vitreous hemorrhage

There was a significant difference between Irbesartan 300mg and 150 mg arms (10.4% vs. 3.2%, P=0.005) in the incidence rate of dizziness.

Safety results:	The number of blood erythrocytes reduced 0.21±0.83 (10^{12}/L) from baseline in patients with Irbesartan 300mg at week 24. Statistical significance in blood erythrocytes change between 300 and 150 mg arms (P =0.006) at week 24. Serum creatinine increased in patients with Irbesartan 300 and 150mg (P<0.05, increase vs. baseline for each arm), no statistical significance between two arms (P=0.64). Serum sodium was decreased 1.2±4.4(umol/L) from baseline in patients with Irbesartan 300mg (P=0.01, decrease vs. baseline) at week 24, no statistical significance in serum sodium change between two arms (P=0.11) at week 24. Except BP, there was no significant difference from baseline on vital signs and physical examination in patients with Irbesartan 300 and 150mg.
Pharmacokinetic results:	NA
Date of report:	April-2009