	Arm A (Gefitinib arm) N=145	Arm B (Pemetrexed-Platinum arm) N=145
CR	1 (0.7%)	0
PR	86 (59.3%)	59 (40.7%)
SD	38 (26.2%)	55 (37.9%)
PD	12 (8.3%)	16 (11.0%)
Not evaluable	8 (5.5%)	15 (10.4%)

Table S1 : Response details in both arms.

	Median PFS in months	HR	95% CI HR	P value
Age				
Non elderly (n= 247)	6.6 (95%CI 5.5-7.6)	0.77	0.55-1.08	0.128
Elderly (n=43)	6.2 (95%CI 5.6-6.8)			
Gender				
Male (n=164)	5.7 (95%CI 4.5-7.1)	1.58	1.20-2.08	0.001
Female (n=126)	8.6 (95%CI 6.7-10.5)			
Smoking history				
Ex smoker (n=60)	6.1 (95%CI 4.6-7.5)	1.05	0.76-1.46	0.755
Never smoker (n=230)	6.5 (95%CI 5.6-7.5)			
Tobacco history				
Present (n=111)	5.7 (95%CI 3.9-7.5)	1.08	0.83-1.41	0.552

Absent (n=179)	7.2 (95%CI 5.8-8.6)			
ECOG PS				
PS 0-1 (n=273)	6.4 (95%CI 5.7-7.1)	0.89	0.53-1.49	0.644
PS 2 (n=17)	5.7 (95%CI 3.4-8.0)			
Stage				
Stage III (n=5)	8.5 (95%CI 2.4-14.6)	1.15	0.46-2.87	0.766
Stage IV (n=285)	6.4 (95%CI 5.7-7.0)			
Presence of brain metastasis				
Yes (n=45)	5.6 (95%CI 3.4-7.8)	1.44	1.03-2.02	0.034
No (n=245)	6.6 (95%CI5.4-7.5)			
Presence of liver metastasis				
Yes (n=75)	5.6 (95%CI 3.6-7.6)	1.55	1.16-2.07	0.003
No (n=215)	6.5 (95%CI 5.3-7.8)			
EGFR mutation status				
Exon 21(n=116)	6.7 (95%CI 5.5-7.9)	1.03	0.79-1.34	0.836
Exon 19 (n=168)	6.3 (95%CI 6.0-6.6)			
Study arm				
Pemetrexed Platinum arm (n=145)	5.6 (95% CI 4.2-7.0)	0.65	0.50-0.85	0.001
Gefitinib arm (n=145)	8.4 (95%CI 6.3-10.5)			

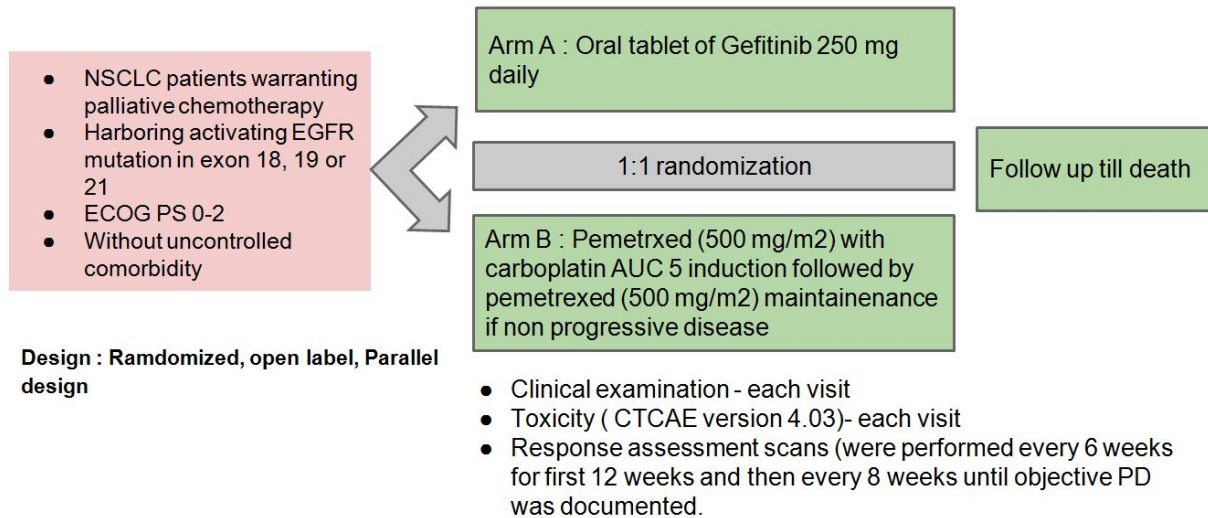Table S2 : Multivariate analysis details of progression free survival.

	Median OS in months	HR	95% CI HR	P value
Age				
Non elderly (n= 247)	20.5 (95%CI 17.3-23.8)	0.91	0.57-1.44	0.672

Elderly (n=43)	18.8 (95%CI 16.5-21.1)			
Gender				
Male (n=164)	18.8 (95%CI 16.8-20.8)	1.70	1.18-2.41	0.004
Female (n=126)	24.2 (95%CI 19.4-29.1)			
Smoking history				
Ex smoker (n=60)	16.9 (95%CI 12.8-21.0)	1.23	0.83-1.82	0.305
Never smoker (n=230)	21.5 (95%CI 18.5-24.6)			
Tobacco history				
Present (n=111)	18.8 (95%CI 14.1-23.5)	1.07	0.77-1.48	0.699
Absent (n=179)	20.9 (95%CI 18.0-23.8)			
ECOG PS				
PS 0-1 (n=273)	20.5 (95%CI 17.8-23.3)	0.58	0.31-3.24	0.082
PS 2 (n=17)	12.2 (95%CI 6.9-17.6)			
Stage				
Stage III (n=5)	28.9 (95%CI 0.2-57.6)	1.01	0.31-3.24	0.992
Stage IV (n=285)	19.8 (95%CI 16.9-22.6)			
Presence of brain metastasis				
Yes (n=45)	19.4(95%CI 17.0-21.9)	1.50	1.01-2.24	0.047
No (n=245)	20.9 (95%CI 17.4-24.3)			
Presence of liver metastasis				
Yes (n=75)	17.3 (95%CI 14.3-20.3)	1.51	1.06-2.15	0.023
No (n=215)	22.6 (95%CI 19.5-25.7)			
EGFR mutation status				
Exon 21(n=116)	17.7 (95%CI 13.8-21.6)	1.654	1.19-2.30	0.003
Exon 19 (n=168)	23.0 (95%CI 19.3-26.6)			

Study arm				
Pemetrexed Platinum arm (n=145)	22.6 (95% CI 18.6-26.6)	1.28	0.92-1.79	0.133
Gefitinib arm (n=145)	18.0 (95%CI 15.2-20.8)			

Table S3 : Multivariate analysis details of overall survival .

Figure 1S : Study protocol

- NSCLC patients warranting palliative chemotherapy
- Harboring activating EGFR mutation in exon 18, 19 or 21
- ECOG PS 0-2
- Without uncontrolled comorbidity

Arm A : Oral tablet of Gefitinib 250 mg daily

1:1 randomization

Arm B : Pemetrxed (500 mg/m2) with carboplatin AUC 5 induction followed by pemetrexed (500 mg/m2) maintainenance if non progressive disease

Follow up till death

Design : Ramdomized, open label, Parallel design

- Clinical examination - each visit
- Toxicity (CTCAE version 4.03)- each visit
- Response assessment scans (were performed every 6 weeks for first 12 weeks and then every 8 weeks until objective PD was documented.

To demonstrate a 50% improvement in PFS for gefitinib as compared to pemetrexed-carboplatin, with 80% power and 5% type one error and with an expected dropout rate of 5%, we planned to enroll 290 patients.