

Results

Diabetes duration (years)	Studied groups	Normoalbuminuric diabetic patients without complications (Group I) n=35	Microalbuminuric diabetic patients with complications (Group II) n=35	t	P
$\bar{X} \pm SD$		4.40 $\pm$ 3.03	13.60 $\pm$ 3.53	11.69	<0.001
Range		1 - 10	8 - 20		

This table shows that the duration of diabetes is significantly higher in diabetic patients with microalbuminuria and with complications (group II) (13.60 $\pm$ 3.53) compared to diabetic patients with normoalbuminuria and without complications (group I) (4.40 $\pm$ 3.03), <0.001.

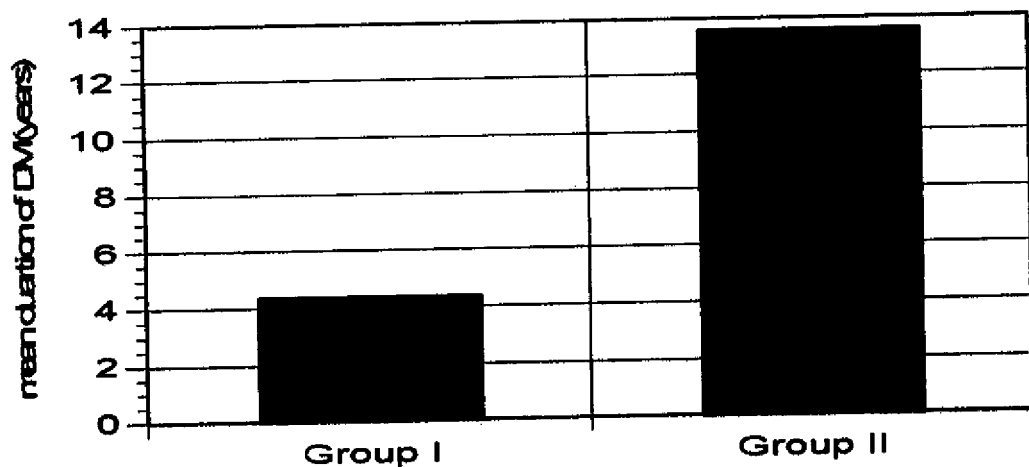


Figure (1): Mean duration of DM (years) of the diabetic patients.

	complications (Group I) n=35		complications (Group II) n=35		(Group III) n=15		F	P
	$\bar{X}$	$\pm$ SD	$\bar{X}$	$\pm$ SD	$\bar{X}$	$\pm$ SD		
g blood mg/dl	198.60#	51.34	316.94 *#	86.22	83.86	5.47	73.98	<0.0
ed bin %	9.14 #	0.65	11.89 *#	1.46	5.10	0.43	224.08	<0.0
rol mg/dl	248.22#	19.96	281.22 *#	14.25	167.73	11.54	248.38	<0.0
n HDL- rol mg/dl	37.0 #	2.02	30.34 *#	1.98	49.80	6.62	184.11	<0.0
n LDL- rol mg/dl	161.45#	18.02	186.37 *#	10.18	89.73	11.88	243.80	<0.0
n rides	250.31#	19.08	326.65 *#	31.58	142.20	12.67	309.32	<0.0
m ine mg/dl	1.05 #	0.11	1.96 *#	1.61	0.70	0.14	10.29	<0.0

* Significant than normoalbuminuric diabetic patients without complications.

Significant than controls.

diabetic patients without complications had significantly higher values of the above parameters compared with the control group.

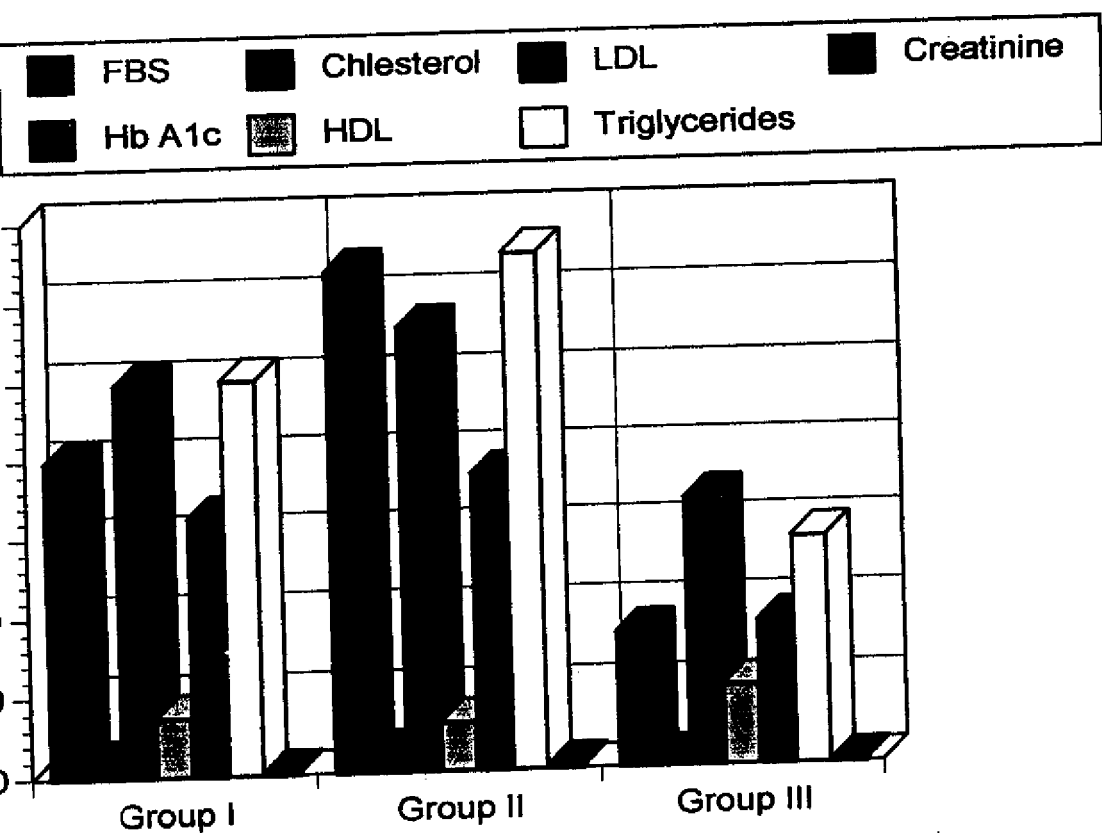


Figure (2): Mean values of laboratory parameters of the studied groups.

Urinary microalbumin (mg/l)	(Group I) n=35		(Group II) n=35		(Group III) n=15	
	No	%	No	%	No	%
<20	35	100.0	0	0.0	15	100.0
20	0	0.0	7	20.0	0	0
50	0	0.0	7	20.0	0	0
100	0	0.0	21	60.0	0	0
Total	35	100	35	100	15	100

$$\chi^2 = 85.00$$

$$p < 0.001$$

This table shows that there is a statistically significant difference in the distribution of the level of urinary microalbumin, where 60% of microalbuminuric diabetic patients had values of 100mg/l compared with normoalbuminuric diabetic patients and controls.

Levels of urinary microalbumin:

■ <20mg/l

■ 20mg/l

■ 50mg/l

■ 100mg/l

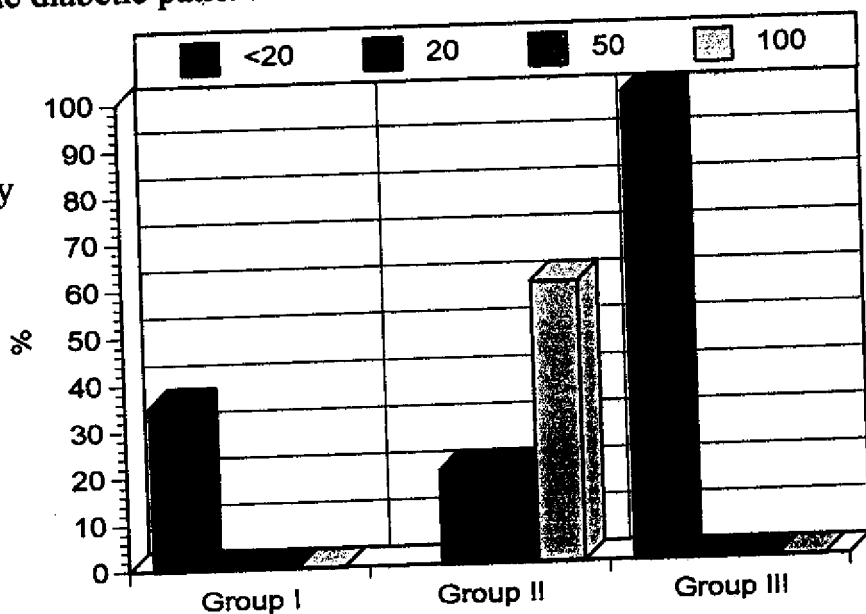


Figure (3): Percentage distribution of the level of urinary microalbumin in the studied groups.

TAFI (%)	n=35	n=35	n=15		
± SD	67.28 ± 6.01	159.43 ± 32.88*#	53.31 ± 3.55	207.50	<0.001
Range	58.40 - 85.70	108.28 - 210	47.70 - 57.60		

* Significant than normoalbuminuric diabetic patients without complications.

Significant than controls.

This table shows that TAFI concentration (%) is significantly higher in microalbuminuric diabetic patients with complications (group II) (159.43 ± 32.88) compared to normoalbuminuric diabetic patients without complications (group I) (67.28 ± 6.01) and control group (group III) (53.31 ± 3.55).

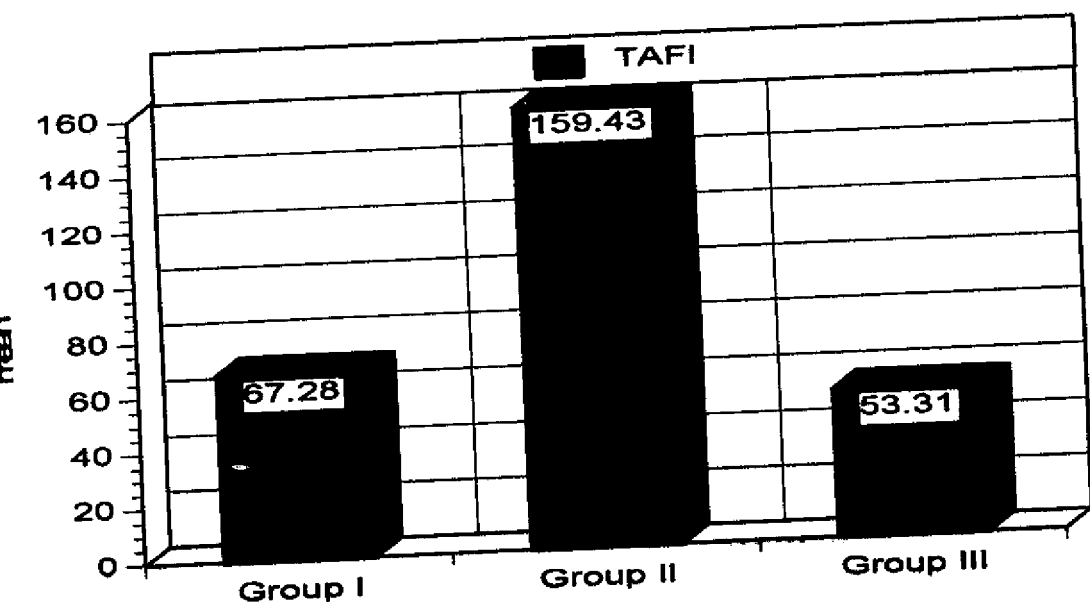


Figure (4): Mean value of TAFI concentration (%) in studied groups.

Age (years)	+ 0.448	< 0.001
Duration of diabetes (years)	+ 0.898	< 0.001
Fasting blood glucose (mg/dl)	+ 0.838	< 0.001
Glycated hemoglobin (HbA _{1c}) (%)	+ 0.891	< 0.001
Serum cholesterol (mg/dl)	+ 0.884	< 0.001
Serum HDL-cholesterol (mg/dl)	- 0.884	< 0.001
Serum LDL-cholesterol (mg/dl)	+ 0.879	< 0.001
Serum triglycerides (mg/dl)	+ 0.909	< 0.001
Serum creatinine (mg/dl)	+ 0.836	< 0.001

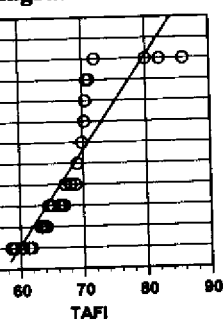
This table shows that, TAFI shows a significant positive correlation with the age of diabetic patients, the duration of diabetes, fasting blood glucose, glycated hemoglobin, serum cholesterol, serum LDL-cholesterol, serum triglycerides and serum creatinine, and a significant negative correlation with serum HDL-cholesterol.

Duration of diabetes (years)	+ 0.961	< 0.001
Fasting blood glucose (mg/dl)	+ 0.681	< 0.001
Glycated hemoglobin (HbA _{1c}) (%)	+ 0.771	< 0.001
Serum cholesterol (mg/dl)	+ 0.987	< 0.001
Serum HDL-cholesterol (mg/dl)	- 0.949	< 0.001
Serum LDL-cholesterol (mg/dl)	+ 0.979	< 0.001
Serum triglycerides (mg/dl)	+ 0.849	< 0.001
Serum creatinine (mg/dl)	+ 0.677	< 0.001
Urinary microalbumin (mg/l)	+ 0.843	< 0.001

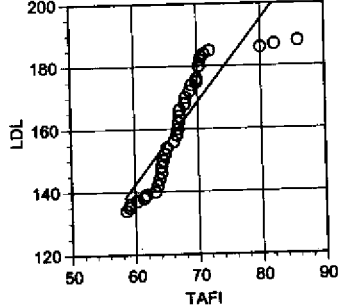
This table shows that, TAFI shows a significant positive correlation with the age of diabetic patients, the duration of diabetes, fasting blood glucose, glycated hemoglobin, serum cholesterol, serum LDL-cholesterol, serum triglycerides, serum creatinine and urinary microalbumin, and a significant negative correlation with serum HDL-cholesterol.

Age (years)	+ 0.333	< 0.001
Duration of diabetes (years)	+ 0.943	< 0.001
Fasting blood glucose (mg/dl)	+ 0.801	< 0.001
Glycated hemoglobin (HbA _{1c}) (%)	+ 0.907	< 0.001
Serum cholesterol (mg/dl)	+ 0.845	< 0.001
Serum HDL-cholesterol (mg/dl)	- 0.944	< 0.001
Serum LDL-cholesterol (mg/dl)	+ 0.792	< 0.001
Serum triglycerides (mg/dl)	+ 0.942	< 0.001
Serum creatinine (mg/dl)	+ 0.615	< 0.001

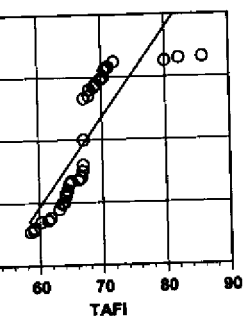
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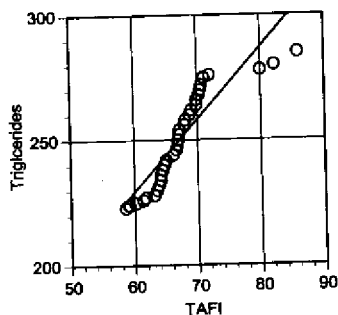
Scatter diagram of TAFI and FBS



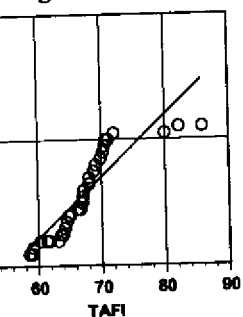
Scatter diagram of TAFI and triglyceride



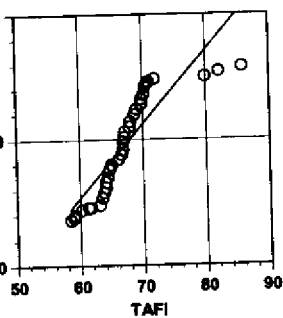
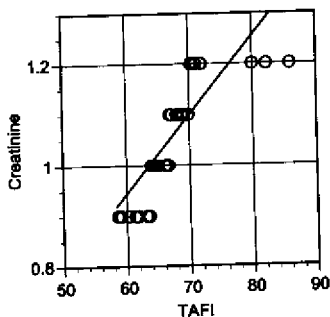
Scatter diagram of TAFI and Hb A1C

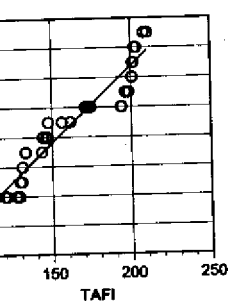


Scatter diagram of TAFI and creatinine

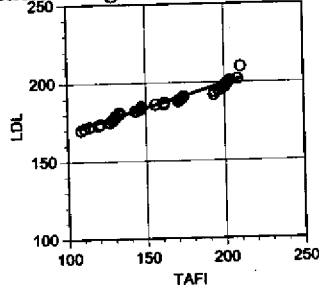


Scatter diagram of TAFI and Cholesterol

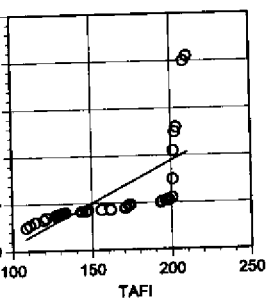




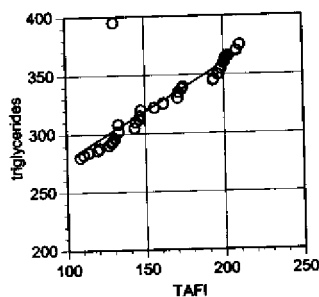
Scatter diagram of TAFI and fasting blood sugar



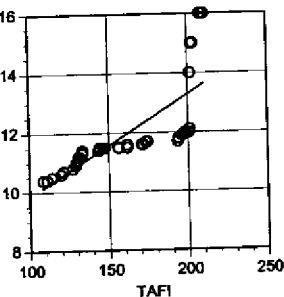
Scatter diagram of TAFI and triglycerides



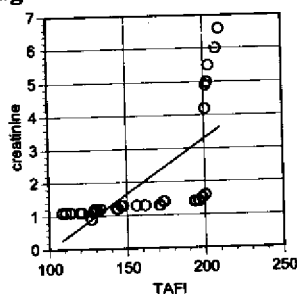
Scatter diagram of TAFI and HbA1C



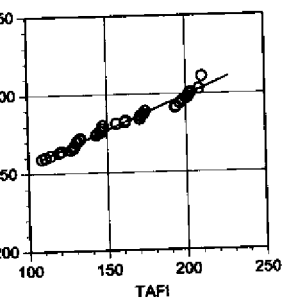
Scatter diagram of TAFI and creatinine

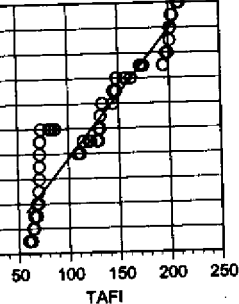


Scatter diagram of TAFI and cholesterol

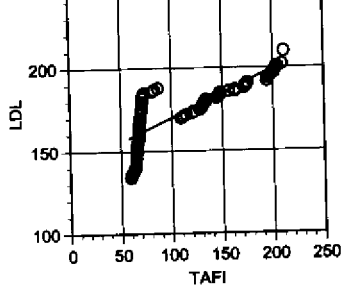


Scatter diagram of TAFI and microalbumin

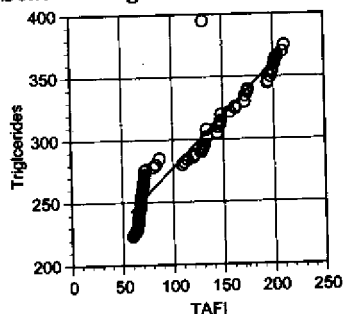




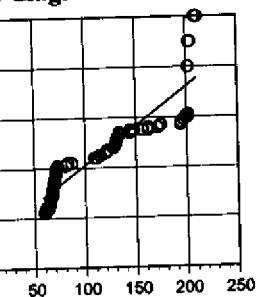
Scatter diagram of TAFI and FBS



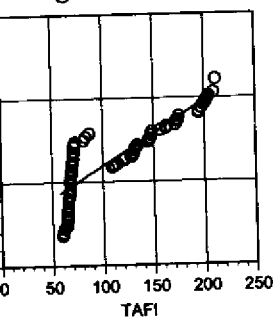
Scatter diagram of TAFI and triglycerides



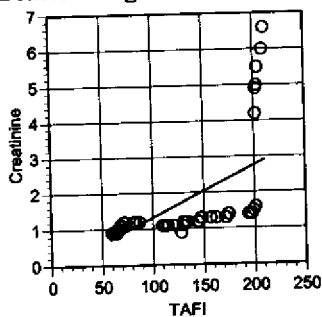
Scatter diagram of TAFI and Hb A1C



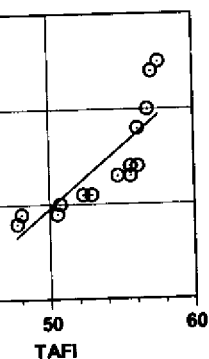
Scatter diagram of TAFI and Cholesterol



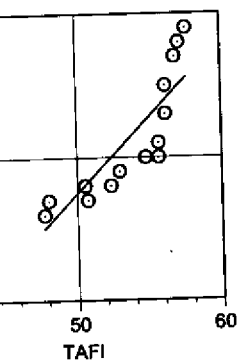
Scatter diagram of TAFI and creatinine



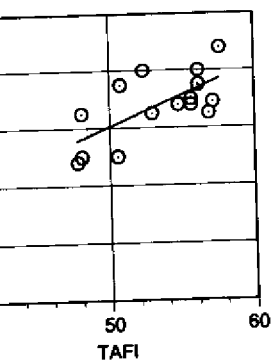
Scatter diagram of TAFI and fasting blood sugar



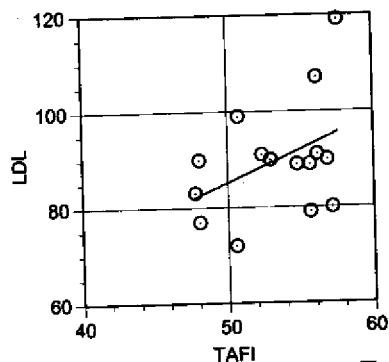
Scatter diagram of TAFI and HbA1C



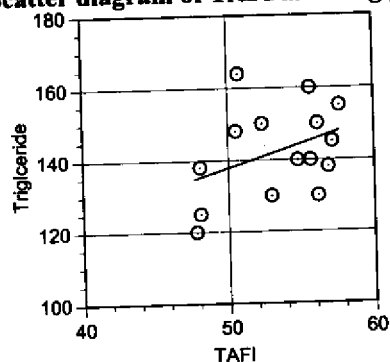
Scatter diagram of TAFI and cholesterol



Scatter diagram of TAFI and LDL



Scatter diagram of TAFI and Triglycerides



Scatter diagram of TAFI and creatinine

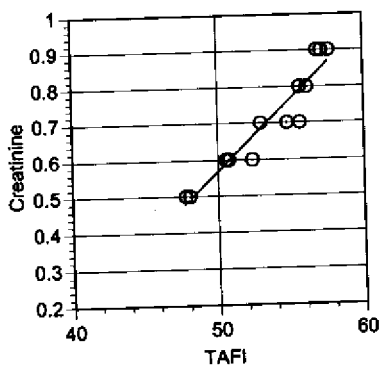


Table (9): Master sheet of the control group (Group III).

No	Sex	Age	Duration	FBG mg/dl	Glycated Hb %	Cholesterol mg/dl	HDL-C mg/dl	LDL-C mg/dl	Triglycerides mg/dl	S creatinine mg/dl
1	♀	48	0	88	5.5	180	59	91	150	0.8
2	♀	64	0	84	5.3	175	42	107	130	0.8
3	♂	56	0	83	5	168	51	89	140	0.7
4	♀	70	0	79	4.7	165	47	90	138	0.5
5	♀	52	0	81	4.8	180	59	91	150	0.6
6	♂	32	0	78	4.6	148	41	83	120	0.5
7	♀	60	0	84	5.1	170	59	79	160	0.8
8	♂	50	0	95	5.9	188	43	119	155	0.9
9	♀	48	0	79	4.8	150	48	72	148	0.6
10	♂	55	0	83	5	168	51	89	140	0.7
11	♀	47	0	94	5.8	169	60	80	145	0.9
12	♀	40	0	79	4.7	150	48	77	125	0.5
13	♂	51	0	80	4.7	175	43	99	164	0.6
14	♀	60	0	90	5.7	165	47	90	138	0.9
15	♂	53	0	81	4.9	165	49	90	130	0.7

Table (10): Master sheet of normalalbuminuric diabetic patients without complications (Group 1)

No	Sex	Age	Duration	FBG mg/dl	Glycated Hb %	Cholesterol mg/dl	HDL-C mg/dl	LDL-C mg/dl	Triglycerides mg/dl	S.creatinine mg/dl
1	♀	45	1	127	8.2	218	40	134	223	0.9
2	♂	51	1	138	8.4	223	39	139	227	0.9
3	♀	58	2	149	8.5	227	39	142	230	0.9
4	♂	32	3	160	8.7	235	38	150	238	1
5	♀	60	3	165	8.8	238	38	152	240	1
6	♀	62	3	167	8.8	240	38	154	242	1
7	♀	47	3	168	8.9	242	38	156	244	1
8	♀	48	4	200	9.1	251	37	164	252	1.1
9	♀	40	3	170	8.9	244	37	158	246	1
10	♀	41	2	157	8.6	233	38	148	236	1
11	♀	60	4	233	9.2	253	37	166	254	1.1
12	♀	40	2	145	8.4	224	39	140	228	0.9
13	♂	49	2	150	8.5	229	39	144	232	1
14	♂	61	10	262	10.1	274	34	185	276	1.2
15	♀	53	9	257	10	272	35	183	272	1.2
16	♀	54	8	255	9.9	271	35	182	270	1.2
17	♀	45	4	242	9.5	260	36	172	260	1.1

18	♀	54	1	130	8.3	220	40	136	224	0.9
19	♀	55	1	136	8.4	223	40	138	226	0.9
20	♀	50	3	175	9	246	37	160	248	1.1
21	♂	50	1	135	8.4	222	40	137	225	0.9
22	♂	53	2	155	8.6	231	39	146	234	1
23	♂	54	1	128	8.2	219	40	135	224	0.9
24	♂	55	7	250	9.8	268	35	180	268	1.2
25	♀	50	6	248	9.7	264	36	176	264	1.1
26	♀	54	5	244	9.6	262	36	174	262	1.1
27	♀	53	7	250	9.8	268	35	180	268	1.2
28	♀	64	10	266	10.2	279	34	188	285	1.2
29	♂	50	6	248	9.7	266	35	178	266	1.1
30	♀	48	4	235	9.3	255	36	168	256	1.1
31	♀	47	4	240	9.4	257	36	170	258	1.1
32	♂	59	9	258	10	273	34	184	275	1.2
33	♂	60	10	263	10.1	275	34	186	278	1.2
34	♀	61	10	265	10.2	277	34	187	280	1.2
35	♂	53	3	180	9	249	37	162	250	1.1

Table (11): Master sheet of microalbuminuric diabetic patients with complications (neuropathy)

(Group II).

No	Sex	Age	Duration	FBG mg/dl	Glycated Hb%	Cholesterol mg/dl	HDL-C mg/dl	LDL-C mg/dl	Triglycerides mg/dl	S.creatinine mg/dl	mic
1	♂	50	12	281	11.4	272	31	181	302	1.2	
2	♂	55	14	285	11.5	280	31	185	320	1.3	
3	♂	56	14	287	11.5	282	31	186	325	1.3	
4	♀	70	9	265	10.6	263	33	173	286	1.1	
5	♀	66	15	300	11.7	291	30	192	345	1.4	
6	♀	70	20	600	16	303	27	202	370	6	
7	♀	57	15	289	11.6	284	30	188	330	1.3	
8	♀	58	11	279	11.2	270	32	179	296	1.2	
9	♀	50	12	280	11.3	271	31	180	308	1.2	
10	♀	52	9	260	10.5	261	33	172	284	1.1	
11	♂	69	20	610	16	311	26	210	375	6.6	
12	♀	65	18	410	14	298	27	199	364	4.9	
13	♀	68	19	450	15	300	27	200	365	5	
14	♂	65	15	302	11.8	292	29	194	346	1.4	
15	♀	60	13	284	11.5	278	31	184	315	1.3	
16	♀	48	8	250	10.4	259	33	170	280	1.1	

17	♀	50	8	255	10.4	260	33	171	282	1.1
18	♀	55	13	283	11.5	275	31	182	310	1.2
19	♂	60	19	460	15	301	27	201	366	5.5
20	♀	60	17	310	12	297	28	197	360	1.6
21	♀	59	14	288	11.6	283	31	187	326	1.3
22	♂	60	15	296	11.7	289	30	191	340	1.4
23	♀	59	16	305	11.9	294	29	195	350	1.4
24	♂	45	9	276	10.9	266	32	176	292	1.1
25	♀	48	9	270	10.7	264	33	174	288	1.1
26	♀	50	12	282	11.4	274	31	182	305	1.2
27	♀	54	13	283	11.5	276	31	183	312	1.3
28	♀	48	9	275	10.8	265	32	175	290	0.9
29	♂	50	10	278	11.1	269	32	178	295	1.2
30	♀	54	14	286	11.5	281	31	186	322	1.3
31	♀	61	15	290	11.6	286	30	189	335	1.3
32	♂	56	10	277	11	267	32	177	294	1.2
33	♀	63	18	350	12.1	298	28	198	362	4.2
34	♂	50	15	295	11.7	287	30	190	338	1.4
35	♀	55	16	308	12	296	29	196	355	1.5