

## 24-hours blood pressure monitoring results

Patient name: **John Sample**

Code: **SAMPL**

Address:

Phone:

Notes: **Meas. №74 - example with the proved shorttime BP rising**

Age (years): **28**

Sex: **m**

Height (cm):

Weight

Patient card No.:

Department:

Room:

Monitor: **BPLab MnSDP-2 #01030028 Rev.BP005**

Test start: **28.04.2001 (18:00)**

Total monitoring time: **23:52**

Total number of **85** Successful: **74**

Analyzed: **74** Validity: **95,0%**

**Test correction has not been done**

### Day-time (07:00 - 23:00). Number of readings: 57

Average SYS	146 mmHg	high ( $\geq 140$ )
Average DIA	96 mmHg	high ( $\geq 90$ )
Time index SYS	56 %	high ( $\geq 30\%$ )
Time index DIA	72 %	high ( $\geq 30\%$ )
Variability SYS	17 mmHg	high ( $\geq 15$ )
Variability DIA	11 mmHg	norm ( $< 14$ )

### Night-time (23:01 - 06:59). Number of readings: 17

Average SYS	135 mmHg	high ( $\geq 125$ )
Average DIA	88 mmHg	high ( $\geq 75$ )
Time index SYS	84 %	high ( $\geq 30\%$ )
Time index DIA	93 %	high ( $\geq 30\%$ )
Variability SYS	11 mmHg	norm ( $< 15$ )
Variability DIA	10 mmHg	norm ( $< 12$ )

Average pulse pressure: **49 mmHg, possibly high (46...53)**

Night fall index SYS: **8%, non-deeper (0%...10%)**

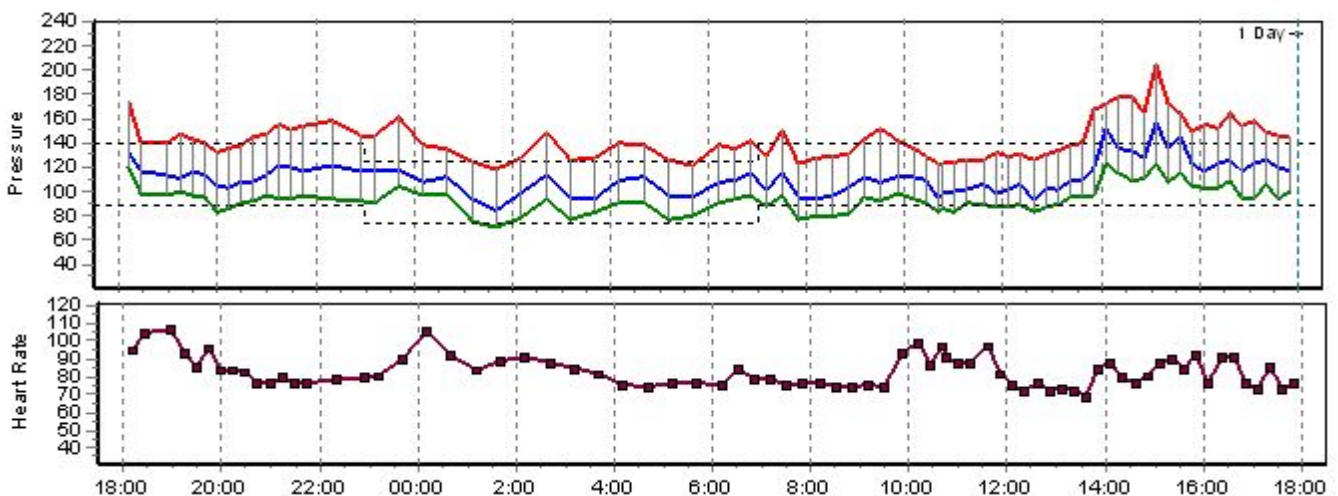
Night fall index DIA: **8%, non-deeper (0%...10%)**

The probability of hidden arterial hypertension presence on the criteria of Vilkov-Oganov-Schalnova: **---**

### Morning trend

Amplitude of morning raise SYS	30 mmHg	norm ( $< 56$ )
Amplitude of morning raise DIA	21 mmHg	norm ( $< 36$ )
Velocity of morning raise SYS	8 mmHg/hour	norm ( $< 10$ )
Velocity of morning raise DIA	5 mmHg/hour	norm ( $< 6$ )

### BP monitoring data



Physician: \_\_\_\_\_

Doctor: \_\_\_\_\_

Date: "\_\_\_" \_\_\_\_\_ 20\_\_ year

**24/48 hours results. Number of readings: 74**

	Minimum	Average	Maximum	Variabilit	Correct.variab.	
Systolic BP	119	143	205	16	---	mmHg
Diastolic BP	72	94	124	11	---	mmHg
Mean BP	85	113	157	14	---	mmHg
Pulse Pressure	34	49	82	9	---	mmHg
Heart Rate	69	83	107	9	---	beats/min
Double Product	94	119	180	19	---	mmHg/min
Respiration Rate	---	---	---	---	---	(1/min)

Systolic BP > 140/125 **61%**Diastolic BP > 90/75 **76%****Day-time (07:00 - 23:00). Number of readings: 57**

	Minimum	Average	Maximum	Variabilit	Correct.variab.	
Systolic BP	123	146	205	17	---	mmHg
Diastolic BP	78	96	124	11	---	mmHg
Mean BP	93	115	157	14	---	mmHg
Pulse Pressure	34	50	82	9	---	mmHg
Heart Rate	69	83	107	9	---	beats/min
Double Product	94	121	180	20	---	mmHg/min
Respiration Rate	---	---	---	---	---	(1/min)

Systolic BP > 140 **54%**Diastolic BP > 90 **70%****Night-time (23:01 - 06:59). Number of readings: 17**

	Minimum	Average	Maximum	Variabilit	Correct.variab.	
Systolic BP	119	135	162	11	---	mmHg
Diastolic BP	72	88	105	10	---	mmHg
Mean BP	85	105	119	10	---	mmHg
Pulse Pressure	36	47	57	6	---	mmHg
Heart Rate	74	84	105	8	---	beats/min
Double Product	94	114	146	15	---	mmHg/min
Respiration Rate	---	---	---	---	---	(1/min)

Systolic BP > 125 **82%**Diastolic BP > 75 **94%****Special period (06:00 - 06:00). Number of readings: 0**

	Minimum	Average	Maximum	Variabilit	Correct.variab.	
Systolic BP	---	---	---	---	---	mmHg
Diastolic BP	---	---	---	---	---	mmHg
Mean BP	---	---	---	---	---	mmHg
Pulse Pressure	---	---	---	---	---	mmHg
Heart Rate	---	---	---	---	---	beats/min
Double Product	---	---	---	---	---	mmHg/min
Respiration Rate	---	---	---	---	---	(1/min)

Systolic BP > 140 **---**Diastolic BP > 90 **---**

**24/48 hours results. Number of readings: 74**

	Pressure	at HRT	at RSP	Time
Maximum SYS	205 mmHg	88 beats/min	---	15:07
Maximum DIA	124 mmHg	88 beats/min	---	14:07
Minimum SYS	119 mmHg	89 beats/min	---	01:41
Minimum DIA	72 mmHg	89 beats/min	---	01:41

Maximum HRT: **107 beats/min in**Minimum HRT: **69 beats/min in****Day-time (07:00 - 23:00). Number of readings: 57**

	Pressure	at HRT	at RSP	Time
Maximum SYS	205 mmHg	88 beats/min	---	15:07
Maximum DIA	124 mmHg	88 beats/min	---	14:07
Minimum SYS	123 mmHg	91 beats/min	---	10:45
Minimum DIA	78 mmHg	76 beats/min	---	07:51

Maximum HRT: **107 beats/min in**Minimum HRT: **69 beats/min in****Night-time (23:01 - 06:59). Number of readings: 17**

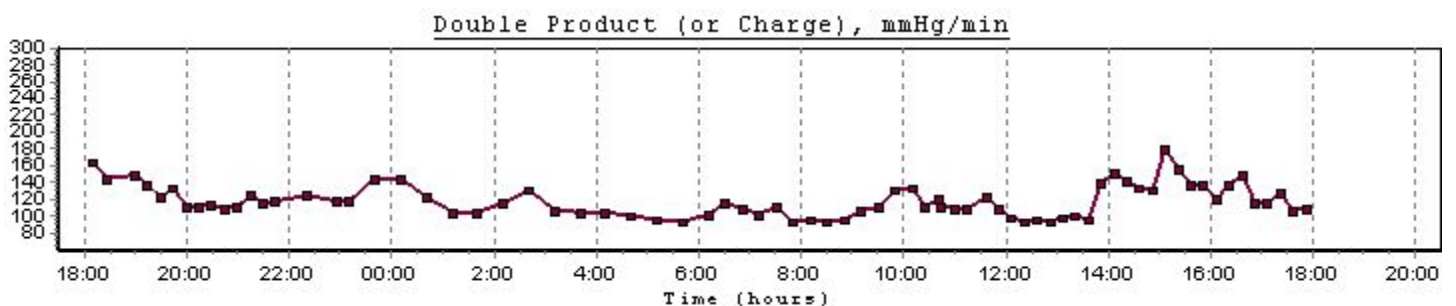
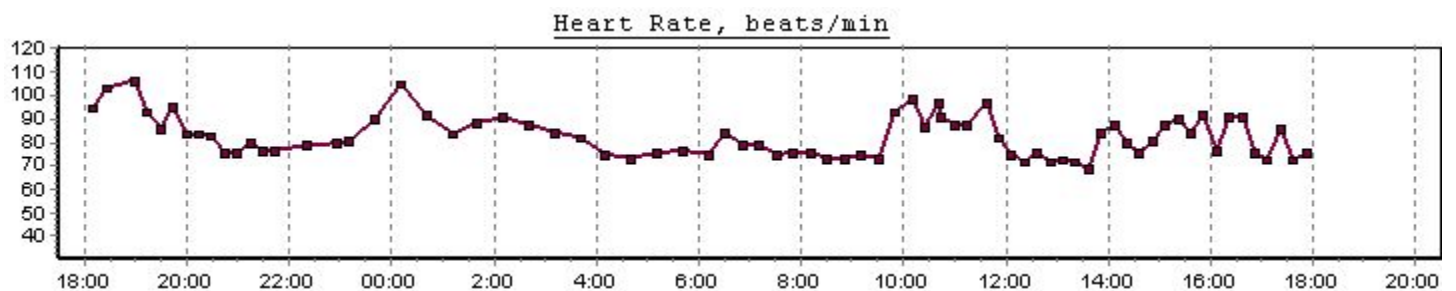
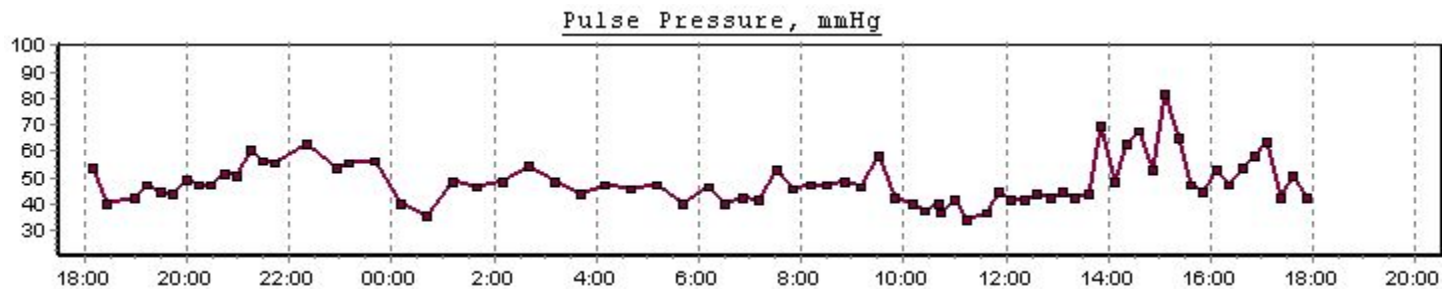
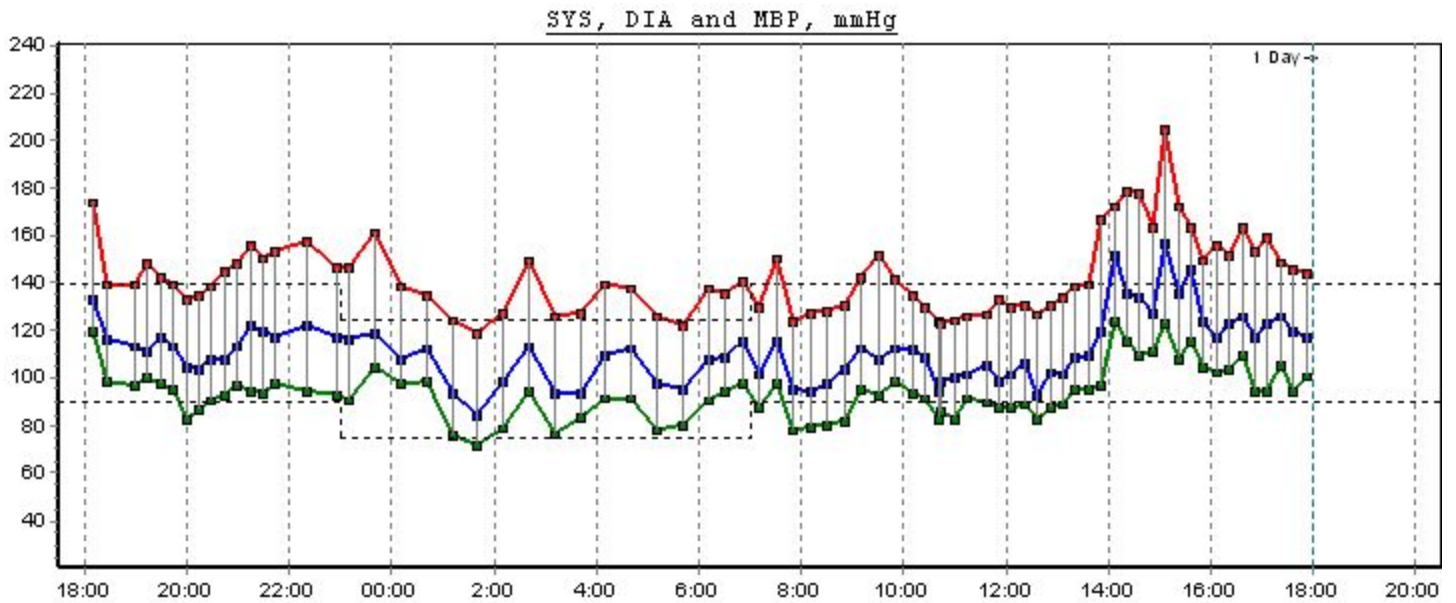
	Pressure	at HRT	at RSP	Time
Maximum SYS	162 mmHg	90 beats/min	---	23:41
Maximum DIA	105 mmHg	90 beats/min	---	23:41
Minimum SYS	119 mmHg	89 beats/min	---	01:41
Minimum DIA	72 mmHg	89 beats/min	---	01:41

Maximum HRT: **105 beats/min in**Minimum HRT: **74 beats/min in****Special period (06:00 - 06:00). Number of readings: 0**

	Pressure	at HRT	at RSP	Time
Maximum SYS	---	---	---	---
Maximum DIA	---	---	---	---
Minimum SYS	---	---	---	---
Minimum DIA	---	---	---	---

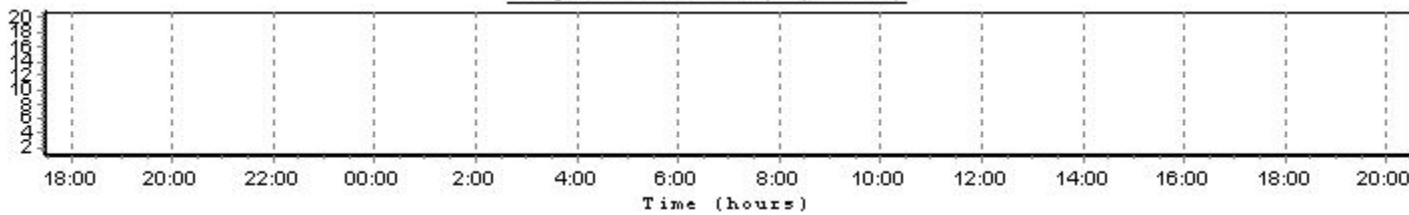
Maximum HRT: **---**Minimum HRT: **---**

BP monitoring data, Day 1

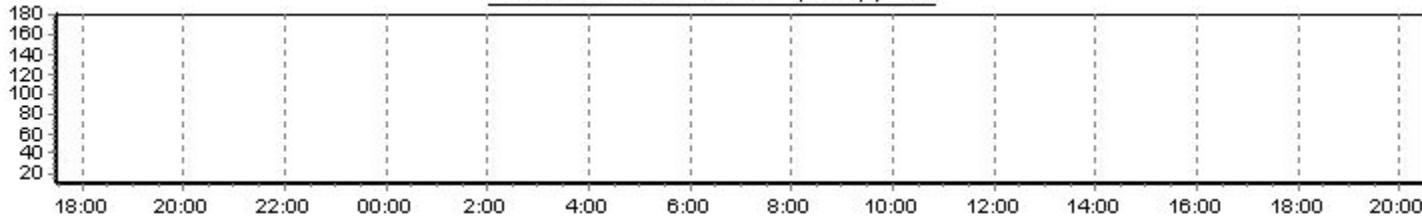


### BP monitoring data, Day 1

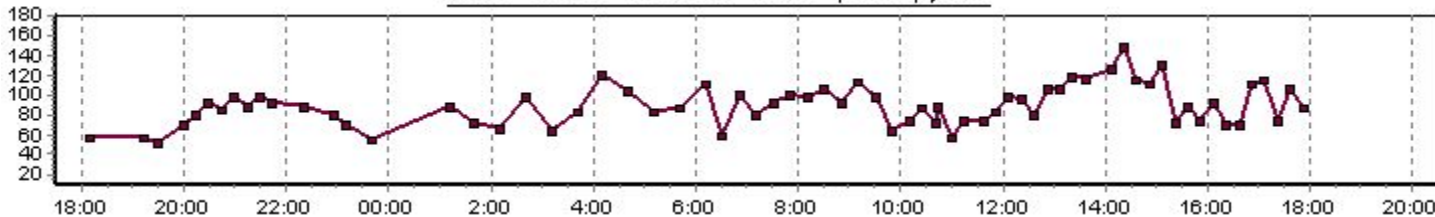
Respiration Rate, (l/min)



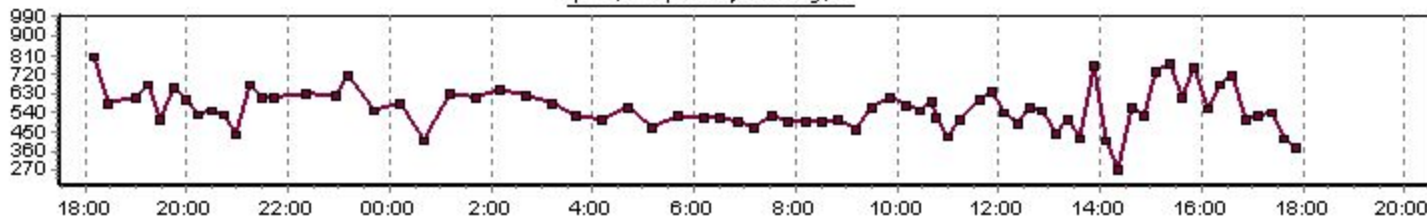
Pulse Transit Time (PTT), ms



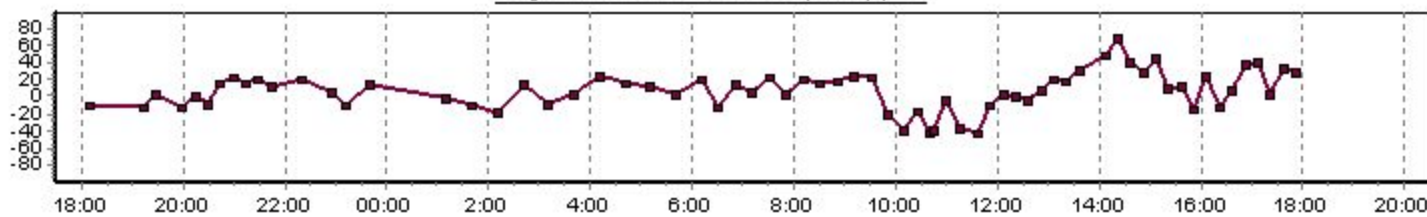
Alt. Pulse Transit Time (PTT2), ms



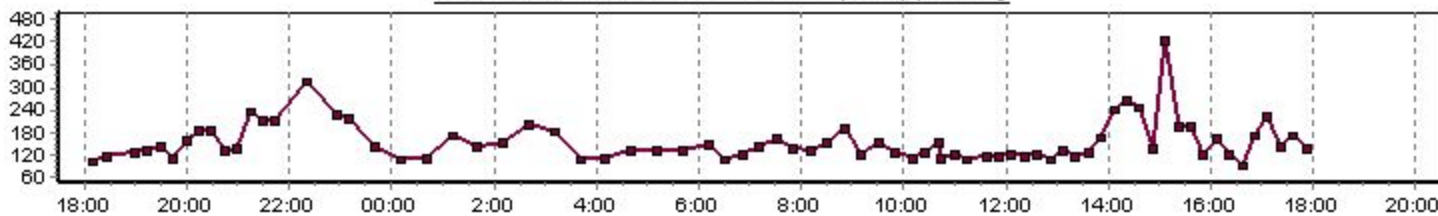
(dP/dt)max, mmHg/s



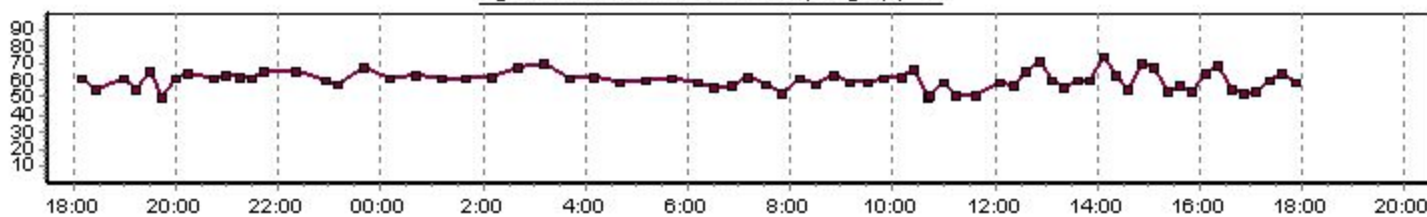
Augmentation Index (AIx), %



Arterial Stiffness Index (ASI), mmHg



Systolic Area Index (Ssys), %



Correction has not been done

## ABPM Data

No.	Time	Pressure				HRT	DP	PTT2	dPdt	AIx	ASI	Ssys	Q	EX	Comment	
		SYS	MBP	DIA	PP											
1	18:09	E96: Pulse not found											#	EE		
2	18:11	174	133	120	54	95	165	58	808	-9	103	61				
3	18:26	140	117	99	41	104	146		587		119	55	?			
4	18:41	E96: Pulse not found												#	EE	
5	18:44	E96: Pulse not found												#	EE	
6	18:59	140	114	97	43	107	150		618		132	61	?			
7	19:14	148	111	100	48	93	138	58	680	-11	137	55				
8	19:29	143	118	98	45	86	123	53	506	3	147	66	?			
9	19:44	140	114	96	44	96	134		656		114	50	?			
10	19:59	133	105	83	50	84	112	70	609	-12	158	62	?			
11	20:14	135	104	87	48	84	113	80	538	2	191	65				
12	20:29	139	108	91	48	83	115	93	549	-8	187					
13	20:44	145	108	93	52	76	110	86	533	17	134	62				
14	20:59	148	114	97	51	76	112	99	437	24	142	64				
15	21:14	156	122	95	61	80	125	90	679	16	241	63	?			
16	21:29	151	120	94	57	77	116	98	610	20	215	61	?			
17	21:44	154	118	98	56	77	119	93	615	13	216	66				
18	21:59	E94: DIA not found												#	EE	
19	22:02	E96: Pulse not found												#	EE	
20	22:17	E96: Pulse not found												#	EE	
21	22:20	158	122	95	63	79	125	90	633	20	317	66	?			
22	22:35	E87: 2 min. exceed												#	EE	
23	22:38	E96: Pulse not found												#	EE	
24	22:53	E96: Pulse not found												#	EE	
25	22:56	147	118	93	54	80	118	80	624	5	227	60	?			
26	23:11	147	117	91	56	81	119	70	716	-10	221	58	?			
27	23:41	162	119	105	57	90	146	55	556	14	145	68				
28	00:11	139	108	98	41	105	146		584		109	62				
29	00:41	135	113	99	36	92	124		409		114	64	?			
30	01:11	125	94	76	49	84	105	90	630		174	62				
31	01:41	119	85	72	47	89	106	72	615	-10	147	62				
32	02:11	128	99	79	49	91	116	67	653	-19	154	63	?			
33	02:41	150	114	95	55	88	132	99	624	15	204	68				
34	03:11	126	94	77	49	85	107	65	590	-7	183	70				
35	03:41	128	94	84	44	82	105	84	530	3	112	61				
36	04:11	140	110	92	48	75	105	122	505	26	117	63	?			
37	04:41	138	113	92	46	74	102	104	571	16	134	59	?			
38	05:11	126	98	78	48	76	96	84	475	11	135	60	?			
39	05:41	122	96	81	41	77	94	88	530	4	137	61				
40	06:11	138	108	91	47	75	104	111	514	20	151	59				
41	06:31	136	109	95	41	85	116	60	516	-13	112	56				
42	06:51	141	116	98	43	79	111	100	499	14	126	57	?			
43	07:11	130	102	88	42	79	103	80	474	5	147	63				
44	07:31	151	116	98	53	75	113	94	527	23	163	58				
45	07:51	124	96	78	46	76	94	101	500	4	140	53	?			
46	08:11	128	95	80	48	76	97	99	496	21	134	61				
47	08:31	129	98	81	48	74	95	106	497	16	153	58				
48	08:51	131	104	82	49	74	97	94	505	18	193	64	?			
49	09:11	143	113	96	47	75	107	113	466	25	126	59				
50	09:31	152	108	93	59	74	112	99	567	23	157	59				

## ABPM Data

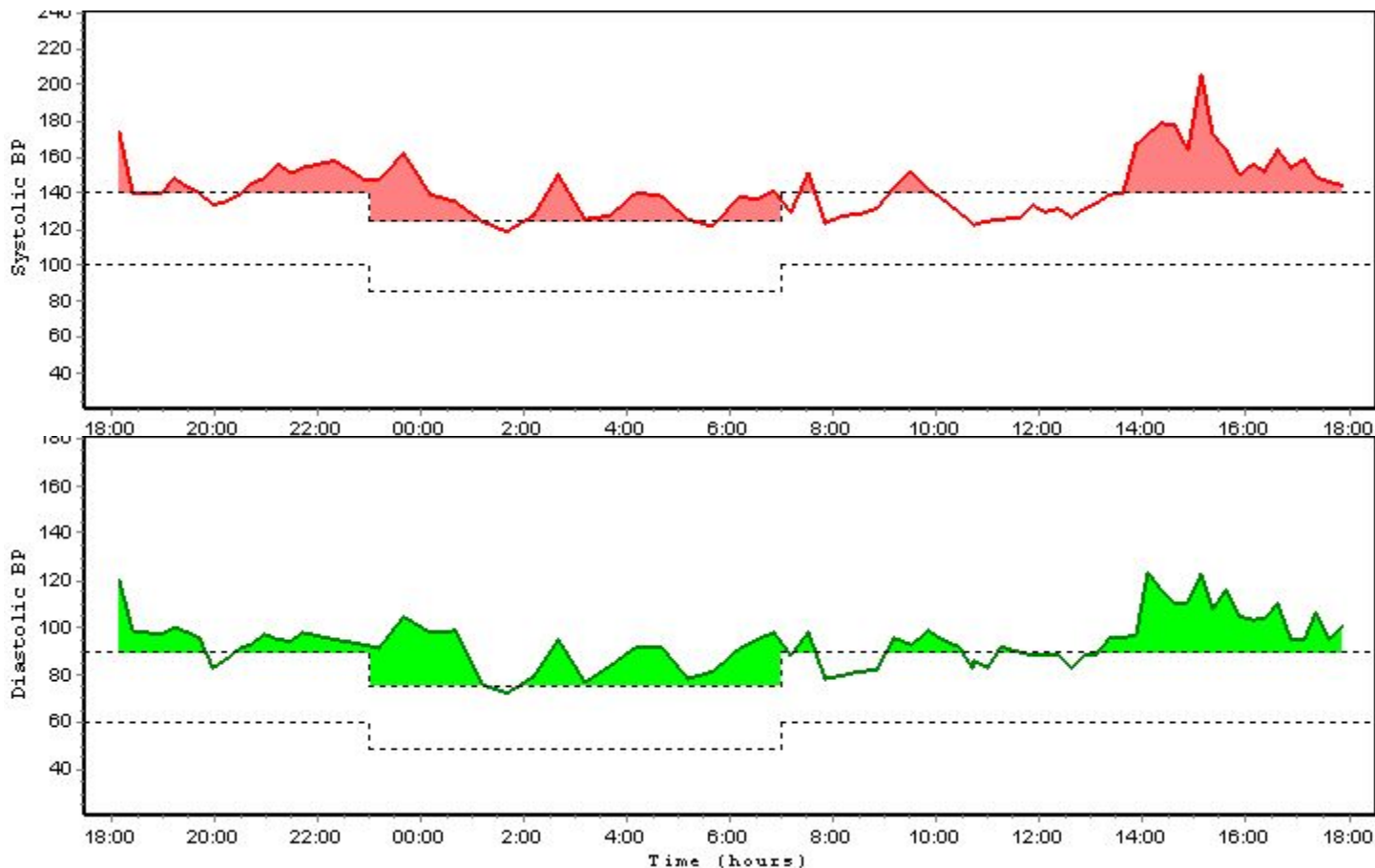
No.	Time	Pressure				HRT	DP	PTT2	dPdt	AIx	ASI	Ssys	Q	EX	Comment
		SYS	MBP	DIA	PP										
51	09:51	142	113	99	43	93	132	66	612	-20	128	61			
52	10:11	135	112	94	41	99	134	75	582	-39	114	63	?		
53	10:26	130	109	92	38	87	113	88	549	-17	128	67	?		
54	10:41	124	95	83	41	97	120	73	593	-42	156	50			
55	10:45	123	99	86	37	91	112	90	519	-39	117	52			
56	11:00	125	100	83	42	88	110	57	432	-4	125	59	?		
57	11:15	126	102	92	34	88	111	74	507	-36	111	52			
58	11:30	E96: Pulse not found												#	EE
59	11:33	E96: Pulse not found												#	EE
60	11:37	127	106	90	37	97	123	75	606	-43	118	52	?		
61	11:52	133	99	88	45	82	109	83	639	-10	122				
62	12:07	130	102	88	42	75	98	99	548	3	125	59			
63	12:22	131	107	89	42	72	94	97	493	0	120	57	?		
64	12:37	127	93	83	44	76	97	80	569	-4	125	66			
65	12:52	131	103	88	43	72	94	106	552	8	108	71			
66	13:07	134	102	89	45	73	98	106	447	20	134	60			
67	13:22	139	109	96	43	72	100	120	505	19	120	56			
68	13:37	140	110	96	44	69	97	117	421	31	131	60			
69	13:52	167	120	97	70	85	142		765		172	60			
70	14:07	173	152	124	49	88	152	127	409	49	242	75	?		
71	14:22	179	136	116	63	80	143	150	269	69	270	64			
72	14:37	178	134	110	68	76	135	116	573	40	247	55			
73	14:52	164	128	111	53	81	133	112	522	30	139	70			
74	15:07	205	157	123	82	88	180	130	736	46	426	68	?		
75	15:22	173	136	108	65	90	156	73	774	10	199	54	?		
76	15:37	164	146	116	48	85	139	90	610	11	200	57	?		
77	15:52	150	124	105	45	92	138	75	759	-15	127	54	?		
78	16:07	156	118	103	53	77	120	94	558	25	166	65			
79	16:22	152	123	104	48	91	138	70	675	-11	124	69	?		
80	16:37	164	126	110	54	91	149	70	723	8	94	55			
81	16:52	154	118	95	59	76	117	112	511	39	174	53	?		
82	17:07	159	123	95	64	73	116	116	527	40	224	54	?		
83	17:22	149	126	106	43	86	128	74	541	3	147	60	?		
84	17:37	146	120	95	51	73	107	106	424	35	176	65	?		
85	17:52	144	118	101	43	76	109	88	375	29	141	59	?		

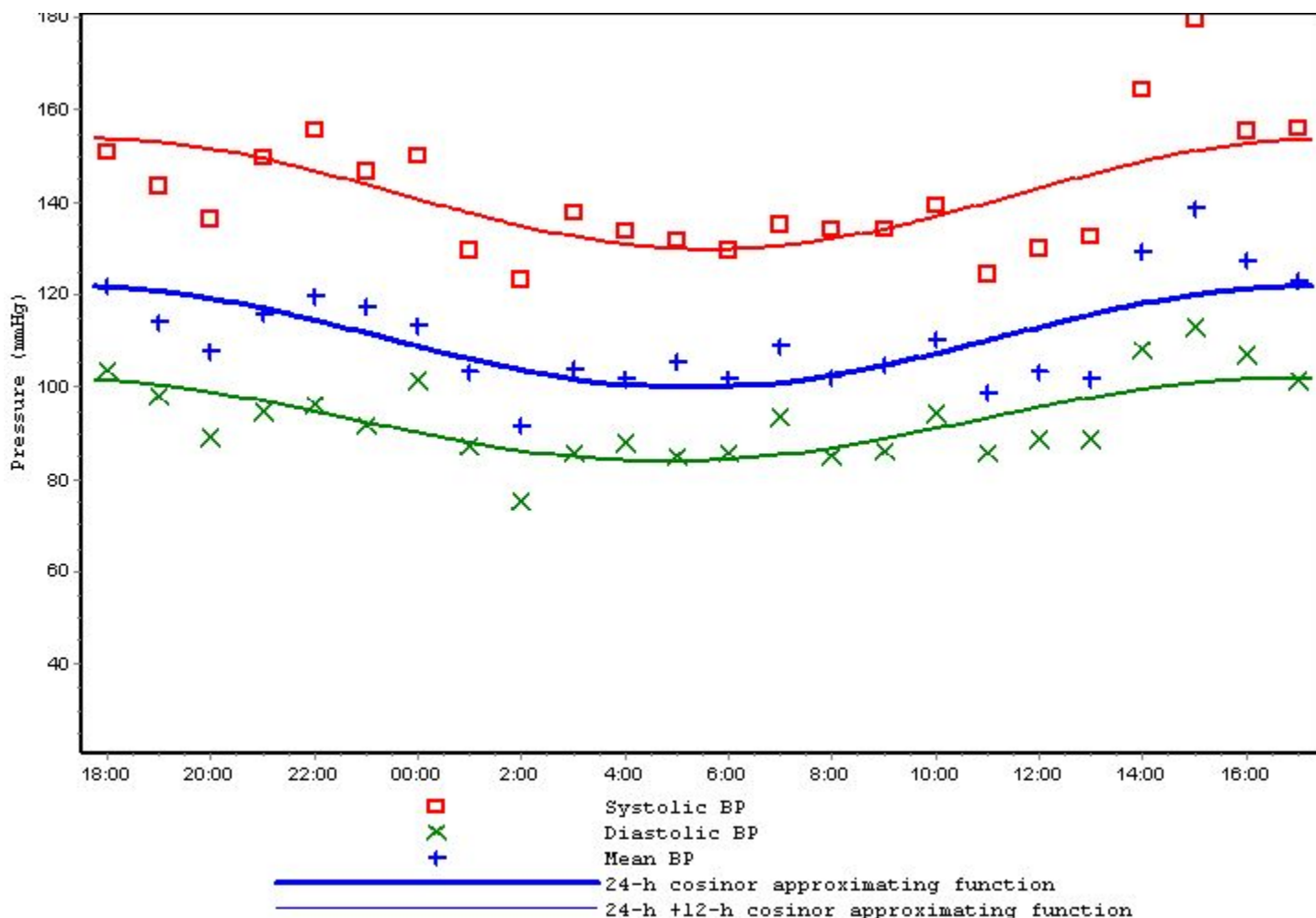
### Pressure load (hypertension episodes)

	24 hours	Day	Night	Special	
SYS limits	---	140	125	140	mmHg
DIA limits	---	90	75	90	mmHg
Area under curve SYS	225	142	83	---	mmHg
Norm. area under curve SYS	10	9	10	---	mmHg
Time index SYS	66	56	84	---	%
Readings index SYS	61	54	82	---	%
Area under curve DIA	216	111	105	---	mmHg
Norm. area under curve DIA	9	7	13	---	mmHg
Time index DIA	79	72	93	---	%
Readings index DIA	76	70	94	---	%

### Hypotension load

	24 hours	Day	Night	Special	
SYS limits	---	100	85	100	mmHg
DIA limits	---	60	48	60	mmHg
Area under curve SYS	0	0	0	---	mmHg
Norm. area under curve SYS	0	0	0	---	mmHg
Time index SYS	0	0	0	---	%
Readings index SYS	0	0	0	---	%
Area under curve DIA	0	0	0	---	mmHg
Norm. area under curve DIA	0	0	0	---	mmHg
Time index DIA	0	0	0	---	%
Readings index DIA	0	0	0	---	%





**The chronobiological analysis (cosinor method)**

	Mesor (mmHg)	24-h. amplitude (mmHg)	24-h. acrophase (hour)	12-h. amplitude (mmHg)	12-h. acrophase (hour)
SYS	142	12 (3)	17:37 (00:57)	--- ( ---)	--- ( ---)
DIA	93	9 (2)	16:47 (00:48)	--- ( ---)	--- ( ---)
MBP	111	11 (2)	17:16 (00:50)	--- ( ---)	--- ( ---)

**Morning trend (6:00 - 12:00)**

	Systolic BP	Diastolic BP	
Morning index Max.	2574	886	(mmHg/min) <sup>2</sup>
Amplitude of morning	30	21	mmHg
Velocity of morning	8	5	mmHg/hour
Morning Max.	152	99	mmHg
Morning Max/night	113	113	%
Trend deviation	8	6	mmHg
Overregulation %	-1550	239	%
Max. velocity	6	8	mmHg/hour

**Arteries rigidity analysis**  
**24/48 hours results. Number of readings: 74**

Value	Mean	Variability	Min.	Max.
SYS, mmHg	143	16	119	205
DIA, mmHg	94	11	72	124
MBP, mmHg	113	14	85	157
PP, mmHg	49	9	34	82
HRT, beats/min	83	9	69	107
PTT, ms				
PTT, ms, normalized to SYS=100 mmHg and HRT=60 beats/min	-	-	-	-
PTT2, ms	90	20	53	150
PTT2, ms, normalized to SYS=100 mmHg and HRT=60 beats/min	109	14	-	-
dPdt, mmHg/s	562	98	269	808
dPdt, mmHg/s, normalized to SYS=100 mmHg and HRT=60 beats/min	376	84	-	-
AIx, %	8	22	-43	69
AIx, %, normalized to HRT=80 beats/min	11	17	-	-
ASI, mmHg	158	54	94	426
ASI, mmHg, normalized to SYS=100 mmHg and HRT=60 beats/min	91	41	-	-
Ssys, %	61	5	50	75
Ssys, %, normalized to SYS=100 mmHg and HRT=60 beats/min	59	5	-	-

<b>Pulse Pressure</b>	<b>49 mmHg</b>	<b>possibly high (46...53)</b>
<b>Mean AIx, normalized to HRT=80 beats/min</b>	<b>11 %</b>	<b>pathology (&gt;=10)</b>
<b>Mean ASI</b>	<b>158 mmHg</b>	<b>CAD Risk Factor: Moderate (81...209)</b>
<b>Ambulatory Arterial Stiffness Index (AASI)</b>	<b>0,415</b>	<b>norm (&lt;0.70)</b>

**Correlation coefficients of parameters**

	SYS	DIA	MBP	PP	HRT	PTT2	dPdt	AIx	ASI
<b>DIA</b>	<b>0,879</b>								
<b>MBP</b>	<b>0,925</b>	<b>0,937</b>							
<b>PP</b>	<b>0,794</b>	<b>0,408</b>	<b>0,577</b>						
<b>HRT</b>	0,035	0,216	0,123	-0,209					
<b>PTT2</b>	<b>0,316</b>	0,228	<b>0,290</b>	<b>0,332</b>	<b>-0,610</b>				
<b>dPdt</b>	<b>0,277</b>	0,145	0,195	<b>0,345</b>	<b>0,441</b>	<b>-0,472</b>			
<b>AIx</b>	<b>0,584</b>	<b>0,415</b>	<b>0,494</b>	<b>0,620</b>	<b>-0,636</b>	<b>0,742</b>	<b>-0,406</b>		
<b>ASI</b>	<b>0,624</b>	<b>0,328</b>	<b>0,549</b>	<b>0,776</b>	-0,153	<b>0,379</b>	0,138	<b>0,487</b>	
<b>Ssys</b>	0,187	0,138	0,159	0,181	-0,103	0,112	-0,124	<b>0,302</b>	<b>0,277</b>