

Demo Patient

Gender:Male Age:27 (DOB: Feb 25 1991) Weight:125 lbs BMI:18.5

Height:5 ft 9 in

Physician Only Report Exam Date:Nov 3 2017 13:12

# **Resting - Right - Arm**

EEI = 0.79 DDI = 0	0.68 DEI = 0.63
AI = -0.48 RI = 0.4	4 SI = 7.46
PTT = 201.45 ms	DPTI/SPTI = 0.33
PWV = 3.98 m/s	Systolic = 118 mmHg
SpO2 = 96 %	Diastolic = 78 mmHg
	CASP = 113 mmHg
°	A isj PVR
° / /	

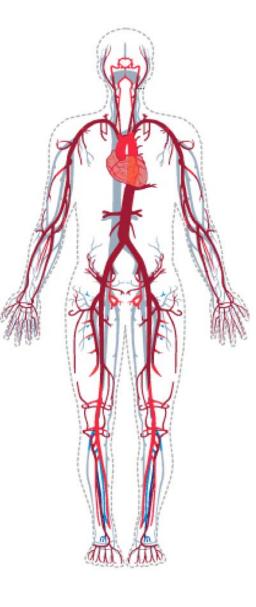
#### **Resting - Right - Ankle**

EEI = 0.77 DDI = 0.79 DEI = 0.57
AI = -0.45 RI = 0.29 SI = 6.04
PTT = 243.38 ms DPTI/SPTI = 0.16
PWV = 5.62 m/s Systolic = 164 mmHg
SpO2 = 96.1 % Diastolic = 118 mmHg
Systolic 3 = 183 mmHg
Diastolic 3 = 87 mmHg



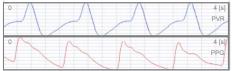
# **Resting - Right - Compare**

dEEI = -0.02 dDDI = 0	).11 dDEI = -0.05	
dAI = 0.03 dRI = -0.15	5 dSI = -1.41	
ftPTT = 45.5 ms d	DPTI/dSPTI = -0.17	
ftPWV = 15.3 m/s d	Systolic = 46 mmHg	
baPWV = 13 m/s d	Diastolic = 40 mmHg	
Ankle/Brachial Index (ABI) = 1.14		
Toe/Brachial Index (TBI) = 1.24		
Normal range		



# Resting - Left - Arm

EEI = 0.67 DDI = 0.56 DEI = 0.54
AI = -0.31 RI = 0.55 SI = 7.97
PTT = 205.82 ms DPTI/SPTI = 0.36
PWV = 3.9 m/s Systolic = 93 mmHg
SpO2 = 95.5 % Diastolic = 70 mmHg
CASP = 90 mmHg



#### **Resting - Left - Ankle**

EEI = 0.83 DDI = 0.	81 DEI = 0.63
AI = -0.54 RI = 0.28	SI = 5.94
PTT = 242.98 ms	DPTI/SPTI = 0.15
PWV = 5.6 m/s	Systolic = 160 mmHg
SpO2 = 91.8 %	Diastolic = 111 mmHg
	Systolic 3 = 166 mmHg
	Diastolic 3 = 91 mmHg
° A A	4 [s]
	4 [s]

# **Resting - Left - Compare**

dAI = -0.22 dRI = -0.27 dSI = -2.03 ftPTT = 37.0 ms dDPTI/dSPTI = -0.21 ftPWV = 20.7 m/s d Systolic = 67 mmHg baPWV = 14 m/s d Diastolic = 41 mmHg	dEEI = 0.16 dDDI =	0.25 dDEI = 0.09
dDT HMST T = -0.2T ftPWV = 20.7 m/s d Systolic = 67 mmHg	dAI = -0.22 dRI = -0	).27 dSI = -2.03
	ftPWV = 20.7 m/s	d Systolic = 67 mmHg

Ankle/Brachial Index (ABI) = 1.47 Toe/Brachial Index (TBI) = 1.25

#### Physician's Notes:



# Arterial Vascular Assessment - Segmental Analysis

Exam Date:11 Sep 2017 14:45

**Demo Patient** Gender:Male Age:52 (DOB: 1 Jan 1966 12:00)

Weight:83 kg BMI:27

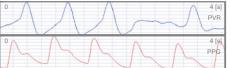
Height: 175 cm

Compare - Arm

dEEI = 0.31 dDDI = 0.24 dDEI = 0.44
dAI = -0.43 dRI = -0.14 dSI = -0.76
dPTT = -13.45 ms dDPTI/dSPTI = -0.1
dPWV = 0.7 m/s d Systolic = 0 mmHg
dSpO2 = -2.4 % d Diastolic = 21 mmHg

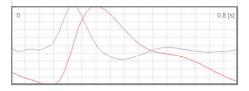
**Resting - Right - Arm** 

EEI = 0.64 DDI = 0.0	63 DEI = 0.5
AI = -0.27 RI = 0.45	SI = 8.55
PTT = 155.41 ms	DPTI/SPTI = 0.28
PWV = 5.18 m/s	Systolic = 128 mmHg
SpO2 = 96.4 %	Diastolic = 71 mmHg
	CASP = 122 mmHg
	7



#### **Resting - Right - Ankle**

EEI = 0.55 DDI = 0.63 DEI = 0.36
AI = -0.14 RI = 0.41 SI = 6.87
PTT = 214.64 ms DPTI/SPTI = 0.25
PWV = 6.35 m/s Systolic = 160 mmHg
SpO2 = 96.2 % Diastolic = 74 mmHg

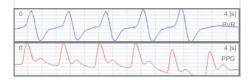


# **Resting - Right - Compare**

dEEI = -0.09 dDDI :	= 0 dDEI = -0.14
dAI = 0.13 dRI = -0.	05 dSI = -1.68
ftPTT = 60.88 ms	dDPTI/dSPTI = -0.03
ftPWV = 9.73 m/s	d Systolic = 31 mmHg
dSpO2 = -0.2 %	d Diastolic = 3 mmHg
Ankle/Brachial Index (ABI) = 0.99 Toe/Brachial Index (TBI) = 1.15 Acceptable, Borderline	

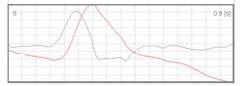
# Standing - Arm

EEI = 0.95 DDI = 0.	87 DEI = 0.93
AI = -0.71 RI = 0.32	SI = 7.79
PTT = 141.96 ms	DPTI/SPTI = 0.18
PWV = 5.88 m/s	Systolic = 128 mmHg
SpO2 = 94 %	Diastolic = 92 mmHg
	CASP = 122 mmHg



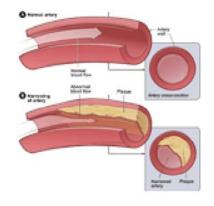
## **Standing - Ankle**

1 DEI = 0.7
SI = 7.97
DPTI/SPTI = 0.1
Systolic = 142 mmHg
Diastolic = 110 mmHg



# **Standing - Compare**

dEEI = -0.25 dDDI =	= 0.03 dDEI = -0.23
dAI = 0.35 dRI = -0.	.12 dSI = 0.18
ftPTT = 71 ms	dDPTI/dSPTI = -0.08
ftPWV = 7.05 m/s	d Systolic = 5 mmHg
dSpO2 = -2.2 %	d Diastolic = 11 mmHg
Ankle/Brachial Index	(ABI) = 1.03
Toe/Brachial Index (1	FBI) = 0.96



#### Physician's Notes:

All results and analysis should be considered in the context of persons/candidate's case history, symptoms, diagnosis, current medications, treatment plans and therapies. Final diagnosis is the sole responsibility of the licensed medical practitioner after persons examination, lab tests and/or other clinical findings as necessary.

**Compare - Ankle** 

dEEI = 0.15 dDDI =	= 0.28 dDEI = 0.34
dAI = -0.21 dRI = -(	0.21 dSI = 1.09
dPTT = -4.64 ms	dDPTI/dSPTI = -0.14
dPWV = -2.73 m/s	d Systolic = -18 mmHg
dSpO2 = -4.4 %	d Diastolic = 36 mmHg

Gende		t Jan 1 1960	6 12:00)		ht: 183 lb 27	s		Height:5 ft	9 in		Only Report Sep 11 2017	14:45	
							Cardiovaso	ular Functio	on				
ECG		-	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					3	M				
	1				Į.		1 - V					V.	
PPG								3					
	Score	Norms	Descrip	otion					Comments				
EEI	0.7	0.3 - 0.7	EEI is an indicator for left ventricle ejection power and elasticity of large arteries.				ries.	Borderline Normal Blood Circula	tion				
DDI	0.64	0.3 - 0.7	DDI indicates the contractility, tension and stiffness in the small arteries.				Borderline Normal Blood Circulation						
DEI	0.52	0.3 - 0.7	DEI represents the reflection of arterial elasticity and blood flow in the venous system.				is system.	Normal Blood Circulation					
AI	-0.28	<-0.7	Augmentation Index (AI) is a useful marker for cardiac risk. AI increases with age and a sedentary lifestyle.			n age and a	Al is a measure of arterial stiffne positively correlated with pulsew						
ABI	1.04	1 - 1.4	Ankle/Brachial Index				Normal range		are and hypertensio				
тві	1.15	> 0.75	Toe/Bra	Toe/Brachial Index					Normal range	ormal range			
ABIS	1.03	1 - 1.4	Standing	g Ankle/Brachial Ind	ex				Normal range				
TBIS	0.96	> 0.75	Standing	g Toe/Brachial Index	ť				Normal range				
CRR	12.6	> 14	Coronar	y Respiratory Respo	onse				Acceptable, Borderline				
				Sco	re	Units	Norms			Score	Units	Norms	
Reflecti	on Index			0.5			.6585	Stiffness Inc	lex	8.55	m/s	< 8.0	
Stroke	Volume			64.6	6	ml	55-100	Cardiac Out	put	5.29	l/min	4.0-8.0	
Mean A	rterial Pro	essure		88		mmHg	70-110	Blood Volum	ne	5.25	I	3-5	
C1				12.8	3	ml/mmHg	> 10.0	C2		4.73	ml/mmHg	> 6.0	
DPTI/S	PTI			0.26	3	ratio		Pulse Oxime	etry	96.44		>95	
System	ic Vascul	ar Resistan	се	130	7		700-1800	Blood Press	sure	128/71	mmHg	<120	
Ventric	ular Extra	systole		0			< 1	Atrial Extras	systole	0		< 1	
Artifacts	S			1			< 1	QRS		53	ms	60-120	
QTc				354		ms	350-460	ST seg		115	ms	80-120	
PR int				108		ms	120-200	QT		301	ms	350-460	
PR seg 63 ms				63		ms		Body Mass	Index	27		19-25	
FR Sey													
FIX Sey							Sudomot	or Function	1				

Physician's Notes:



# PERIPHERAL ARTERY DISEASE ASSESSMENT

**Demo Patient** 

Gender:Male Age:51 (DOB: Jan 1 1966 12:00) Weight: 183 lbs BMI:27

Height: 5 ft 9 in

**Physician Only Report** Exam Date:Sep 11 2017 14:45

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# ANKLE/BRACHIAL INDEX (ABI) = 1.04

ABI test is a quick, noninvasive way to check your risk of peripheral artery disease (PAD). Peripheral artery disease is a condition in which the arteries in your legs or arms are narrowed or blocked.



Normal range

# TOE/BRACHIAL INDEX (TBI) = 1.15

Determine the severity of peripheral arterial disease present in a lower extremity.



Normal range

# Ejection Elasticity Index (EEI): 0.6

EEI is an indicator for left ventricle ejection power and elasticity of large arteries.

Borderline Normal Blood Circulation

# Dicrotic Dilation Index (DDI): 0.63

DDI indicates the contractility, tension and stiffness in the small arteries

Borderline Normal Blood Circulation

# Dicrotic Elasticity Index (DEI): 0.5

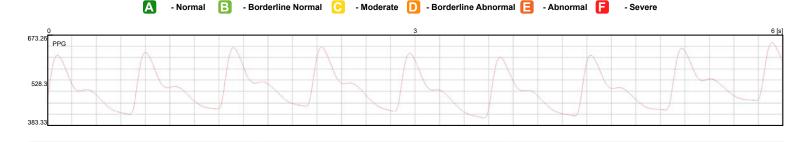
DEI represents the reflection of arterial elasticity and blood flow in the venous system.

Normal Blood Circulation

# **Coronary Respiratory Response: 12.6**

10 CAD occurs when the blood vessels that transport blood to the heart are narrowed and hardened due to plaque buildup (atherosclerosis). 5 14 20 Acceptable, Borderline

	Score	Units	Norms		Score	Units	Norms
Augmentation Index	-0.27		<-0.7	Reflection Index	0.5		.6585
Stiffness Index	8.55	m/s	< 8.0	Stroke Volume	64.6	ml	55-100
Cardiac Output	5.29	l/min	4.0-8.0	Mean Arterial Pressure	88	mmHg	70-110
Blood Volume	5.25	1	3-5	C1	12.72	ml/mmHg	> 10.0
C2	4.73	ml/mmHg	> 6.0	DPTI/SPTI	0.28	ratio	
Pulse Oximetry	96.44		>95	Systemic Vascular Resistance	1307		700-1800
Blood Pressure	128/71	mmHg	<120				



Physician's Notes:



# Arterial Stiffness Assessment - Pulse Wave Velocity

**Demo Patient** 

Gender:Male Age:51 (DOB: Jan 1 1966 12:00) Weight: 183 lbs BMI:27 Height: 5 ft 9 in

Physician Only Report Exam Date:Sep 11 2017 14:45

#### Ejection Elasticity Index (EEI) = 0.65

EEI is an indicator for left ventricle ejection power and elasticity of large arteries.



Borderline Normal Blood Circulation

Dicrotic Dilation Index (DDI) = 0.64

DDI indicates the contractility, tension and stiffness in the small arteries.



Borderline Normal Blood Circulation

#### Dicrotic Elasticity Index (DEI) = 0.52

 $\ensuremath{\mathsf{DEI}}$  represents the reflection of arterial elasticity and blood flow in the venous system.



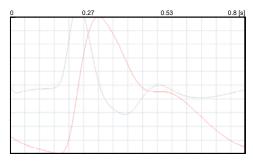
Normal Blood Circulation

A =	Excellent
в =	Borderline Normal
C =	Mild - Moderate
D =	Borderline Abnormal
E =	Abnormal - Severe
F =	Severe

# APG Pattern

An indication of the biological, (rather than chronological) age of arteries





Augmentation Index (AI) = -0.28

Augmentation Index (AI) is a useful marker for cardiac risk. Al increases with age and a sedentary lifestyle.



Al is a measure of arterial stiffness and it provides general information about the arteries. Al is positively correlated with pulsewave velocity, blood pressure and hypertension.

#### Reflection Index (RI) = 0.45



RI is an indicator of the vascular tone of the small arteries. Both vasodilation and vasoconstriction play important roles in determining vascular tone.

#### Stiffness Index (SI) = 8.5 m/s



SI is a measure of large artery stiffness determined by time. SI calculation gives a value similar to aortic pulse wave velocity.

Heart Rate = 82 (bpm	) SpO2 = 96.5 (%)
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C1 - Capacitive Arterial Compliance = 12.8 ml/mmHg

C2 - Oscillatory or Reflective Arterial Compliance = 4.73 ml/mmHg

Diastolic/Systolic Pressure Time Index(DPTI/SPTI) = 0.26

Systemic Vascular Resistance (SVR): 1307 (700-1800)

Blood Volume (BV): 5.25 I (3-5)

Cardiac Output (Q): 5.29 I/min (4.0-8.0)

Pulse Pressure (PP): 32.28 mmHg (25-100)

#### Physician's Notes:



# Arterial Vascular Assessment - Segmental Analysis

Demo Patient

Gender:Male Age:51 (DOB: Jan 1 1966 12:00) Weight: 183 lbs BMI:27 Height: 5 ft 9 in

Physician Only Report Exam Date:Sep 11 2017 14:45

xDPTI/xSPTI= -0.1

xSystolic = 0 mmHg

xPTT = -13.45 ms xSpO2 = -2.41 %

xDiastolic = 21 mmHg

xDPTI/xSPTI= -0.14

xSystolic = -18 mmHg

xDiastolic = 36 mmHg

xSpO2 = -4.42 %

**Compare - Finger** 

xEEI = 0.31 xDDI = 0.244 xDEI = 0.435

xAI = -0.43

xRI = -0.14

xSI = -0.76

xPWV = 0.7 m/s

**Compare - Toe** 

xEEI = 0.153 xDDI = 0.278 xDEI = 0.337

xAI = -0.21 xRI = -0.21

xSI = 1.09

xPTT = -4.64 ms

xPWV = -2.73 m/s

Resting	÷	Right -	Finger
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EEI = 0.644	
DDI = 0.63	
DEI = 0.497	
AI = -0.27	DPTI/SPTI = 0.28
RI = 0.45	Systolic = 128 mmHg
SI = 8.55	Diastolic = 71 mmHg
PTT = 155.41 ms	SpO2 = 96.44 %
PWV = 5.18 m/s	

# **Resting - Right - Toe**

EEI = 0.55	
DDI = 0.63	
DEI = 0.362	
AI = -0.14	DPTI/SPTI = 0.25
RI = 0.41	Systolic = 160 mmHg
SI = 6.87	Diastolic = 74 mmHg
PTT = 214.64 ms	SpO2 = 96.22 %
PWV = 6.35 m/s	

ABI = 1.04

TBI = 1.15

xDPTI/xSPTI = -0.03

xSystolic = 31 mmHg

xDiastolic = 3 mmHg

xSpO2 = -0.21 %

**Resting - Right - Compare** 

xEEI = -0.094

xDEI = -0.135

xDDI = 0

xAI = 0.13

xRI = -0.05

xSI = -1.68

ftPTT = 60.88 ms

ftPWV = 9.73 m/s

# **Standing - Finger**

EEI = 0.955	
DDI = 0.874	
DEI = 0.932	
AI = -0.71	DPTI/SPTI = 0.18
RI = 0.32	Systolic = 128 mmHg
SI = 7.79	Diastolic = 92 mmHg
PTT = 141.96 ms	SpO2 = 94.02 %
PWV = 5.88 m/s	

#### Standing - Toe

EEI = 0.704	
DDI = 0.908	
DEI = 0.699	
AI = -0.36	DPTI/SPTI = 0.1
RI = 0.19	Systolic = 142 mmHg
SI = 7.97	Diastolic = 110 mmHg
PTT = 210 ms	SpO2 = 91.8 %
PWV = 3.62 m/s	

#### **Standing - Compare**

xEEI = -0.251	ABI = 0.83
xDDI = 0.034	TBI = 0.96
xDEI = -0.233	
xAI = 0.35	xDPTI/xSPTI = -0.08
xRI = -0.12	xSystolic = 5 mmHg
xSI = 0.18	xDiastolic = 11 mmHg
ftPTT = 71 ms	xSpO2 = -2.22 %
ftPWV = 7.05 m/s	

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#### Physician's Notes:



# Arterial Vascular Assessment - Resting - Right

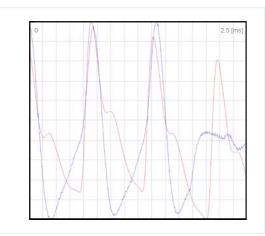
Demo Patient

Gender:Male Age:51 (DOB: Jan 1 1966 12:00) Weight: 183 lbs BMI:27 Height:5 ft 9 in

Physician Only Report Exam Date:Sep 11 2017 14:45

# **RESTING - RIGHT - FINGER**

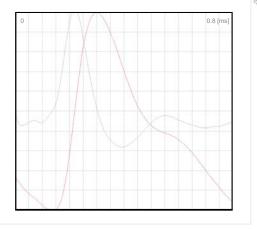
Ejection Elasticity Index (EEI) = 0.644		
Dicrotic Dilation Index (DDI) = 0.63		
Dicrotic Elasticity Index (DEI) = 0.497		
AI = -0.27	DPTI/SPTI = 0.28	
RI = 0.45	Systolic = 128 mmHg	
SI = 8.55	Diastolic = 71 mmHg	
PTT = 155.41 ms	SpO2 = 96.44 %	
PWV = 5.18 m/s		



#### **RESTING - RIGHT - TOE**

Ejection Elasticity Index (EEI) = 0.55 Dicrotic Dilation Index (DDI) = 0.63 Dicrotic Elasticity Index (DEI) = 0.362

AI = -0.14	DPTI/SPTI = 0.25
RI = 0.41	Systolic = 159.56 mmHg
SI = 6.87	Diastolic = 73.95 mmHg
PTT = 214.64 ms	SpO2 = 96.22 %
PWV = 6.35 m/s	



# **RESTING - RIGHT - COMPARE**

x Ejection Elasticity Index (xEEI) = -0.094

- x Dicrotic Dilation Index (xDDI) = 0
- x Dicrotic Elasticity Index (xDEI) = -0.135

xAI = 0.13	xDPTI/xSPTI = -0.03
xRI = -0.05	x Systolic = 30.83 mmHg
xSI = -1.68	x Diastolic = 2.62 mmHg
ftPTT = 60.88 ms	xSpO2 = -0.21 %
ftPWV = 9.73 m/s	

# Ankle/Brachial Index (ABI) = 1.04

# Toe/Brachial Index (TBI) = 1.15

#### Normal range

ABI < 0.4: Severe arterial disease, severe obstruction
0.4 - 0.7: Moderate arterial disease, moderate obstruction
0.7 - 0.9: Some arterial disease, mild obstruction
0.9 - 1.0: Acceptable, Borderline
1.0 - 1.4: Normal range
ABI > 1.4: Abnormal Vessel hardening from PVD
-
TBI < 0.66: Abnormal range
-

0.66 - 0.75: Acceptable, Borderline TBI > 0.75: Normal range

#### Physician's Notes:

🐶 VitalScan

# **ARTERIAL VASCULAR ASSESSMENT - STANDING**

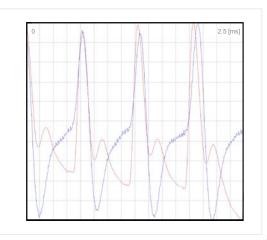
**Demo Patient** 

Gender:Male Age:51 (DOB: Jan 1 1966 12:00) Weight:183 lbs BMI:27 Height:5 ft 9 in

Physician Only Report Exam Date:Sep 11 2017 14:45

# **STANDING - FINGER**

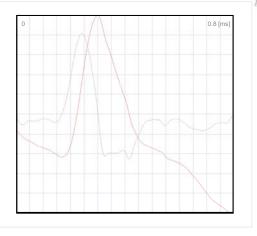
Ejection Elasticity Index (EEI) = 0.955		
Dicrotic Dilation Index (DDI) = 0.874		
Dicrotic Elasticity Index (DEI) = 0.932		
AI = -0.71	DPTI/SPTI = 0.18	
RI = 0.32	Systolic = 128.12 mmHg	
SI = 7.79	Diastolic = 91.79 mmHg	
PTT = 141.96 ms	SpO2 = 94.02 %	
PWV = 5.88 m/s		



#### **STANDING - TOE**

Ejection Elasticity Index (EEI) = 0.704 Dicrotic Dilation Index (DDI) = 0.908 Dicrotic Elasticity Index (DEI) = 0.699

AI = -0.36	DPTI/SPTI = 0.1
RI = 0.19	Systolic = 141.54 mmHg
SI = 7.97	Diastolic = 109.81 mmHg
PTT = 210 ms	SpO2 = 91.8 %
PWV = 3.62 m/s	



# STANDING - COMPARE

x Ejection Elasticity Index (xEEI) = -0.251

- x Dicrotic Dilation Index (xDDI) = 0.034
- x Dicrotic Elasticity Index (xDEI) = -0.233

xAI = 0.35	xDPTI/xSPTI = -0.08
xRI = -0.12	x Systolic = 4.71 mmHg
xSI = 0.18	x Diastolic = 10.57 mmHg
ftPTT = 71 ms	xSpO2 = -2.22 %
ftPWV = 7.05 m/s	

# Ankle/Brachial Index (ABI) = 0.83

# Toe/Brachial Index (TBI) = 0.96

Possible: Some arterial disease, mild obstruction

- ABI < 0.4: Severe arterial disease, severe obstruction 0.4 - 0.7: Moderate arterial disease, moderate obstruction 0.7 - 0.9: Some arterial disease, mild obstruction 0.9 - 1.0: Acceptable, Borderline 1.0 - 1.4: Normal range ABI > 1.4: Abnormal Vessel hardening from PVD
- TBI < 0.66: Abnormal range 0.66 - 0.75: Acceptable, Borderline TBI > 0.75: Normal range

Physician's Notes:



# Arterial Vascular Assessment - Deep Breathing

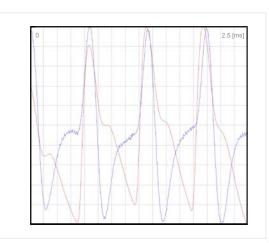
**Demo Patient** 

Gender:Male Age:51 (DOB: Jan 1 1966 12:00) Weight: 183 lbs BMI:27 Height: 5 ft 9 in

Physician Only Report Exam Date:Sep 11 2017 14:45

# **DEEP BREATHING - FINGER**

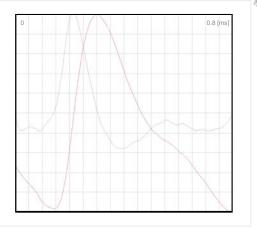
Ejection Elasticity Index (EEI) = 0.605		
Dicrotic Dilation Index (DDI) = 0.635		
Dicrotic Elasticity Index (DEI) = 0.462		
AI = -0.22	DPTI/SPTI = 0.26	
RI = 0.44	Systolic = 129 mmHg	
SI = 8.35	Diastolic = 72 mmHg	
PTT = 151.93 ms	SpO2 = 97.16 %	
PWV = 5.28 m/s		



# **DEEP BREATHING - TOE**

Ejection Elasticity Index (EEI) = 0.491 Dicrotic Dilation Index (DDI) = 0.576 Dicrotic Elasticity Index (DEI) = 0.202

AI = -0.06	DPTI/SPTI = 0.25
RI = 0.41	Systolic = 155.49 mmHg
SI = 7.3	Diastolic = 76.26 mmHg
PTT = 220.16 ms	SpO2 = 89.52 %
PWV = 6.17 m/s	



# **DEEP BREATHING - COMPARE**

x Ejection Elasticity Index (xEEI) = -0.115

- x Dicrotic Dilation Index (xDDI) = -0.059
- x Dicrotic Elasticity Index (xDEI) = -0.26

xAI = 0.16	xDPTI/xSPTI = -0.01
xRI = -0.02	x Systolic = 25.41 mmHg
xSI = -1.04	x Diastolic = 4.19 mmHg
ftPTT = 65.94 ms	xSpO2 = -7.64 %
ftPWV = 8.63 m/s	

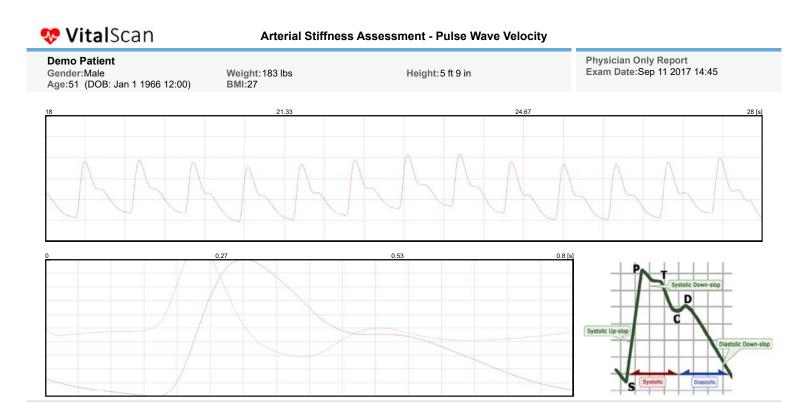
#### Ankle/Brachial Index (ABI) = 1

# Toe/Brachial Index (TBI) = 1.11

Acceptable, Borderline

- ABI < 0.4: Severe arterial disease, severe obstruction 0.4 - 0.7: Moderate arterial disease, moderate obstruction 0.7 - 0.9: Some arterial disease, mild obstruction 0.9 - 1.0: Acceptable, Borderline 1.0 - 1.4: Normal range ABI > 1.4: Abnormal Vessel hardening from PVD TBI < 0.66: Abnormal range
- 0.66 0.75: Acceptable, Borderline TBI > 0.75: Normal range

# Physician's Notes:



HeartRate = 82 (bpm)	Pulse Height (PH) = 47
a-b: 135 ms	a-c: 160 ms
a-d: 195 ms	a-e: 275 ms
b/a: -0.34	c/a: -0.29
d/a: -0.24	e/a: 0

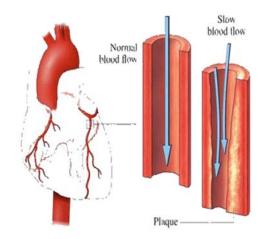
Thank you for taking the Pulse Wave Velocity (PWV) Analysis. This report gives you a quick and objective answer to how your vascular system is currently doing. The aim of these results are not to state a medical diagnosis, but to support a diagnosis by a medical professional. The result should therefore be interpreted accordingly.

PWV is an excellent analysis to evaluate vascular endothelial dysfunction. This represent the elasticity of the artery. Arteries that are atherosc lerotic, arteriosclerotic, or hardened (having reduced elasticity and increased narrowing) place an extra strain on the heart, valves, and arteries which can lead to stroke, heart attack, kidney failure and/or sudden death.

The pulse wave is a physiological phenomenon, observable and measurable in the arterial system during blood circulation. During one heart systole a certain blood volume is expelled. This propagates through the arteries due to the reciprocal transformation between kinetic energy of a segment of the expelled blood volume and the potential energy of a stretched segment of the resilient vascular wall. We can observe the changes in pressure, blood flow, velocity and profile throughout the whole pulse wave. It can be used for classification of the artery elasticity.

How is Pulse Wave Velocity measured by a finger probe?

The heart contracts and creates a direct wave which travels down the arm (red curve). The direct wave is reflected in the lower body, and travels back towards the arm (pink curve). The direct wave and the reflected wave combine to form the finger probe (blue curve).



Stroke Volume (SV): 64.57 ml (55-100)

Stroke Volume Index (SVI): 32.12 ml/m2

Cardiac Output (Q): 5.29 l/min (4.0-8.0)

Cardiac Index (CI): 2.63 l/min/m2 (2.6-4.2)

Systemic Vascular Resistance (SVR): 1307 (700-1800)

Mean Arterial Pressure (MAP): 87.53 mmHg (70-110)

Pulse Pressure (PP): 32.28 mmHg (25-100)

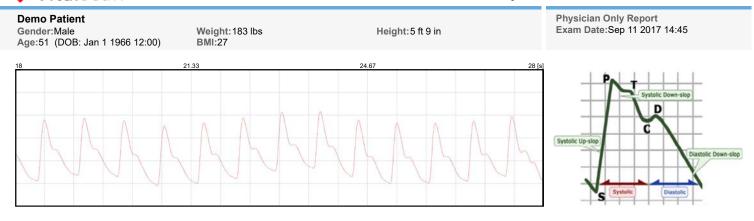
Estimated PPG Ejection Fraction (EF): 74.55 % (55-70)

Blood Volume (BV): 5.25 I (3-5)

Estimated PPG Cardiac Ejection Time (Etc): 320 ms (260-380)

Physician's Notes:

# Arterial Stiffness Assessment - Pulse Wave Velocity



Ejection Elasticity Index (EEI) = 0.65

💀 VitalScan

EEI is an indicator for left ventricle ejection power and elasticity of large arteries.

Borderline Normal Blood Circulation

Dicrotic Dilation Index (DDI) = 0.636

DDI indicates the contractility, tension and stiffness in the small arteries.

**Borderline Normal Blood Circulation** 

# Dicrotic Elasticity Index (DEI) = 0.518

DEI represents the reflection of arterial elasticity and blood flow in the venous system.

Normal Blood Circulation

# Augmentation Index (AI) = -0.28

Augmentation Index (AI) is a useful marker for cardiac risk. AI increases with age and a sedentary lifestyle.

Al is a measure of arterial stiffness and it provides general information about the arteries. Al is positively correlated with pulsewave velocity, blood pressure and hypertension.

#### Reflection Index (RI) = 0.45

RI is an indicator of the vascular tone of the small arteries. Both vasodilation and vasoconstriction play important roles in determining vascular tone.

#### Stiffness Index (SI) = 8.55 m/s

SI is a measure of large artery stiffness determined by time. SI calculation gives a value similar to aortic pulse wave velocity.

#### APG Pattern

An indication of the biological, (rather than chronological) age of arteries

#### APG Type = C

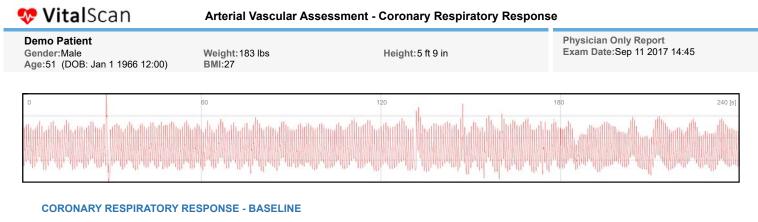
Heart Rate = 82 (bpm)

C1 - Capacitive Arterial Compliance = 12.8 ml/mmHg

C2 - Oscillatory or Reflective Arterial Compliance = 4.73 ml/mmHg

Diastolic/Systolic Pressure Time Index (DPTI/SPTI) = 0.26

# Physician's Notes:



# Ejection Elasticity Index (EEI) = 0.644Dicrotic Dilation Index (DDI) = 0.63Dicrotic Elasticity Index (DEI) = 0.497AI = -0.27DPTI/SPTI = 0.28RI = 0.45Systolic = 128.73 mmHgSI = 8.55Diastolic = 71.34 mmHgPTT = 155.41 msSpO2 = 96.44 %PWV = 5.18 m/s



Ejection Elasticity Index (EEI) = 0.605 Dicrotic Dilation Index (DDI) = 0.635 Dicrotic Elasticity Index (DEI) = 0.462

AI = -0.22	DPTI/SPTI = 0.26
RI = 0.44	Systolic = 130.08 mmHg
SI = 8.35	Diastolic = 72.07 mmHg
PTT = 151.93 ms	SpO2 = 95.88 %
PWV = 5.28 m/s	

# **CORONARY RESPIRATORY RESPONSE - COMPARE**

x Ejection Elasticity Index (xEEI) = -0.039	
x Dicrotic Dilation Index (xDDI) = 0.005	
x Dicrotic Elasticity Index (xDEI) = -0.036	
xAI = 0.05	xDPTI/xSPTI = -0.02
xRI = -0.02	x Systolic = 1.35 mmHg
xSI = -0.2	x Diastolic = 0.74 mmHg
xPTT = -3.48 ms	xSpO2 = 0.72 %
xPWV = 0.1 m/s	

Coronary Respiratory Response (CRR) = 12.6

CRR < 10: Possible: Significant Coronary Artery Disease (S 10 - 14: Acceptable, Borderline CRR > 14: Normal range

Physician's Notes:

All results and analysis should be considered in the context of persons/candidate's case history, symptoms, diagnosis, current medications, treatment plans and therapies. Final diagnosis is the sole responsibility of the licensed medical practitioner after persons examination, lab tests and/or other clinical findings as necessary. 0.8 [m



C

AD)