



6091. . -  
6112289 : 2132580 :

**تقرير عن نتائج البرنامج الوطني  
لتقييم جودة معايرة الواسمات الورمية**

**2008**

# البرنامج الوطني لتقييم جودة معايير الواسمات الورمية

\* \*\* \* :  
\* \* \*

2008

Control

)

( chart

( )

.BIAS

T.PSA

F.PSA

16

25

F.PSA

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E-mail: Quality@aec.org.sy - 6091. . \*

E-mail:scla@mail.sy - 7582. . \*\*

				-1
				-2
				-1-2
				-2-2
				-3
				-4
				-5
				-6
				-1-6
				-2-6
			( A )	-3-6
			( B )	-4-6
	.RE	(Histogram)	( D )	-5-6
.T.PSA	RE			-
.F.PSA	RE			-
				-7
				-8
				-9

: -1

.( 1 )

ISO/IES-

(2)

17025:2005

M-10 ISO/IES-17025:2005

(3 ).

: -2

.% 22

.(4)

-20

) <

.( 34

.( 45 -40

) <

.(Wilm's Tumor

) <

2008/

Biochemical : Tumor Markers \_\_\_\_\_

Substances

cellular tumor

humoral tumor markers

markers

Tracer  
<sup>125</sup>I

Antigenic  
monoclonal antibodies

: -1-2

PSA, CEA, CA 15-3 ..... : .1

: .2

P53, Cerb B2, .... -

UPA, EGFR, Cath D, .... -

: -2-2

.1

.2

.3

.4

.5

.6

.7

: -3

(5)

:

.1

.2

.3

.4

:

-4

: P.S.A. total

: 1-4

RIA -4	Elecsys -1
Mini Vedas -5	LIAISON -2
Axsym -6	Vidas -3

: P.S.A. free

: 2-4

Axsym -3	Elecsys -1
Mini Vedas -4	Immulite -2

:

-5

:

-

-1-5

)

➤

)

(

.(

➤

PSA (T.F)

Base Pool  
International Standard (IS)



)



( UK-NEQAS



:

-2-5



إعداد التقرير المرحلي عن نتائج البرنامج.



Z-

Score

. RE

DIXON



(7 6)

RE



$$RE = \frac{X_{th} - X_{ana}}{X_{th}} \times 100 :$$

$X_{ana}$

$X_{th}$ :

:(8)

%20

(Acceptable) A

%20

%30

(Acceptable with Warning) W

%30

.(Not acceptable) N

:

-3-5



:

-6

- 1-6

مدير المخبر	اسم المخبر	المحافظة	#
.			1
.			2
.			3
.			4
.			5
.			6
.			7
.			8
.			9
.			10
.			11
.			12
.			13
.			14
.			15
.			16

مدير المخبر	اسم المخبر	المحافظة	#
.			1
.			2
***			3
.			4
.			5
.		حماه	6
.			7
.			8
.			9

(A)

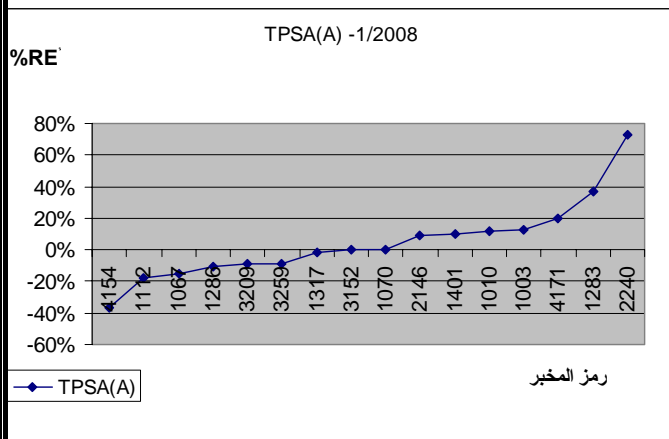
( A ) PSA .total

1.74	7.26	9
0.86	6.94	

A	7.81	1003
A	7.75	1010
A	5.86	1067
A	6.98	1070
A	5.70	1112
N	*9.53	1283
A	6.2	1286
A	6.85	1317
A	7.61	1401
A	7.56	2146
N	*11.97	2240
A	6.97	3152
A	6.3	3209
A	6.3	3259
N	*4.37	4154
W	8.34	4171

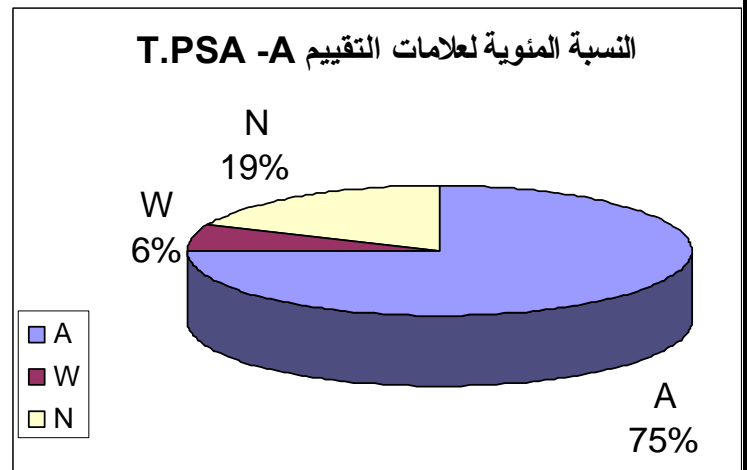
\*

مخططات توزع العلامات في معايرة الواسم ( A ) PSA. total



2008/

11



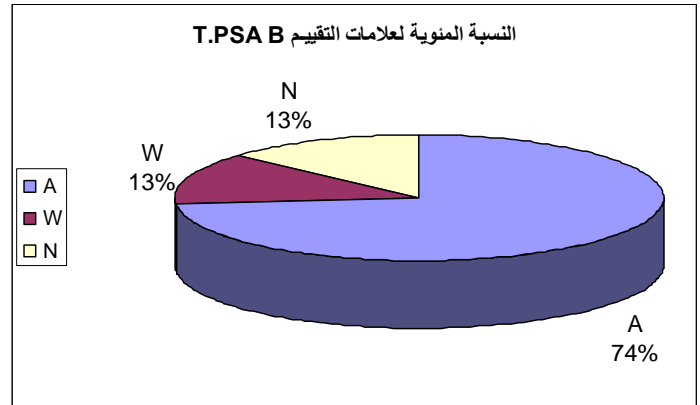
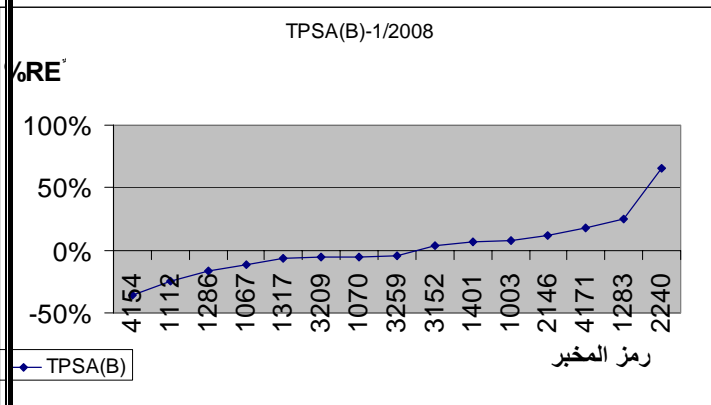
( B ) PSA .total

		<b>9</b>
1.7	7.22	
0.98	7.08	

<b>A</b>	7.64	1003
<b>A</b>	6.27	1067
<b>A</b>	6.73	1070
<b>W</b>	5.35	1112
<b>W</b>	8.83	1283
<b>A</b>	5.9	1286
<b>A</b>	6.66	1317
<b>A</b>	7.58	1401
<b>A</b>	7.89	2146
<b>N</b>	*11.69	2240
<b>A</b>	7.34	3152
<b>A</b>	6.7	3209
<b>A</b>	6.8	3259
<b>N</b>	*4.57	4154
<b>A</b>	8.37	4171

\*

مخططات توزع العلامات في معايرة الواسم ( B ) PSA. total

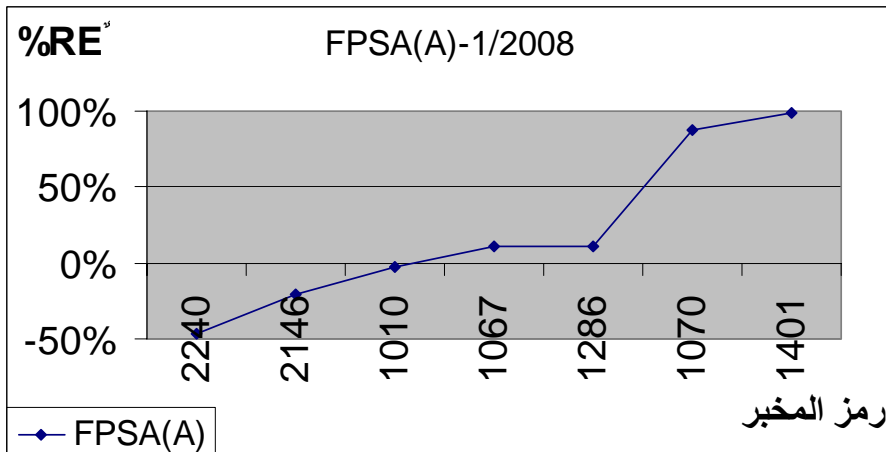
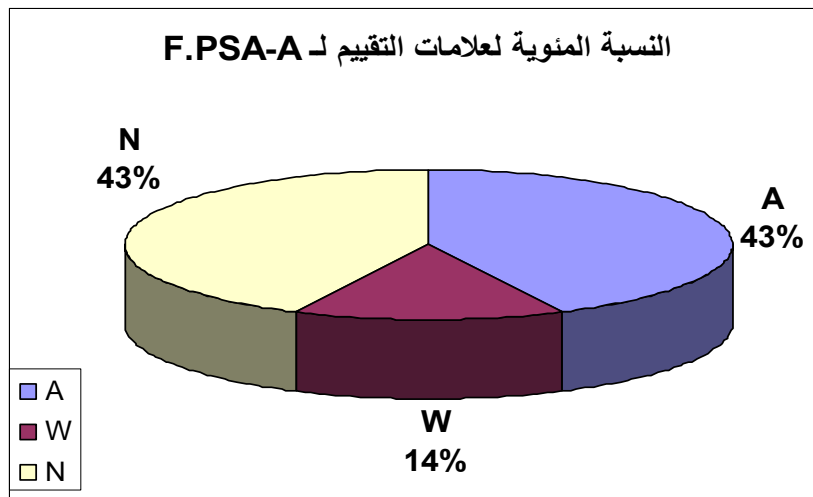


( A ) PSA .free

2.7	6.03	
		-
0.75	5.03	
A	4.92	1010
A	5.583	1067
N	*9.44	1070
A	5.6	1286
N	*9.99	1401
W	4	2146
N	*2.7	2240

\*

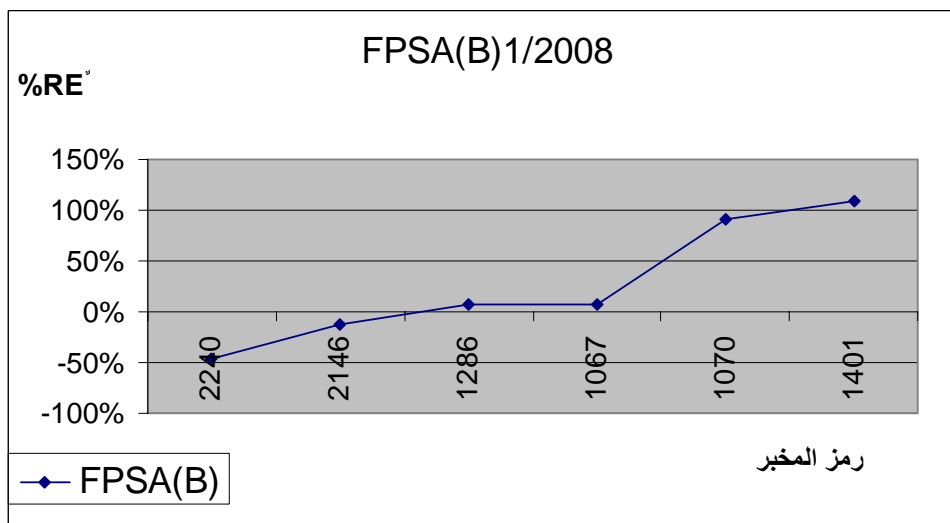
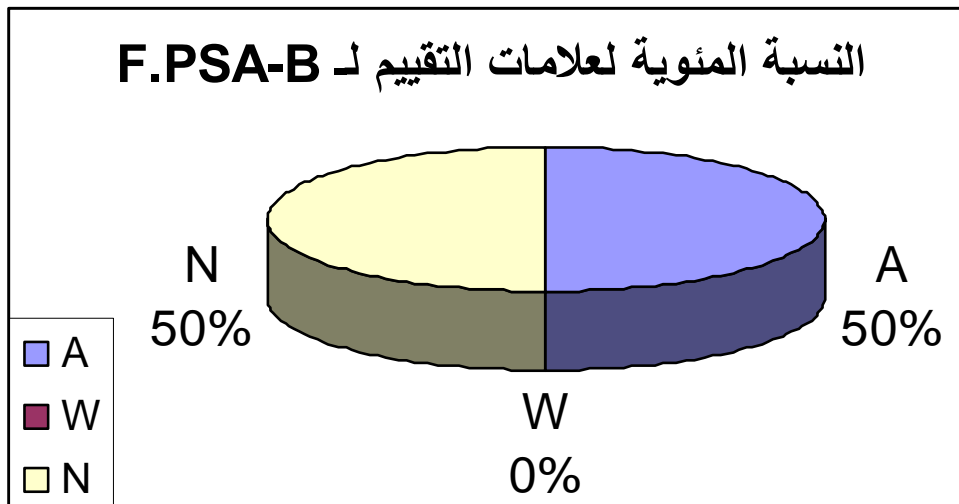
مخطط توزيع العلامات في معايرة الواسم ( A ) PSA. Free



(B) PSA .free

3.1	6.36	
		-
0.58	5.07	
A	5.41	1067
N	*9.69	1070
A	5.4	1286
N	*10.56	1401
A	4.4	2146
N	*2.68	2240

\*



(B)

( 1003 )

PSA . total (ng/ mL)			
A	7.81	6.94	A
A	7.64	7.08	B

PSA . free (ng/ mL)			
		5.03	A
		5.07	B

( 1010 )

PSA . total (ng/ mL)			
A	7.75	6.94	A
		7.08	B

PSA . free (ng/ mL)			
A	4.92	5.03	A
		5.07	B

(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

( 1067 )

PSA . total (ng/ mL)			
A	5.86	6.94	A
A	6.27	7.08	B

PSA . free (ng/ mL)			
A	5.583	5.03	A
A	5.41	5.07	B

( 1070 )

PSA . total (ng/ mL)			
A	6.98	6.94	A
A	6.73	7.08	B

PSA . free (ng/ mL)			
N	9.44	5.03	A
N	9.69	5.07	B

(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

(1112)

PSA . total (ng/ mL)			
A	7.50	6.94	A
W	5.35	7.08	B

PSA . free (ng/ mL)			
		5.03	A
		5.07	B

(1283)

PSA . total (ng/ mL)			
N	9.53	6.94	A
W	8.83	7.08	B

PSA . free (ng/ mL)			
		5.03	A
		5.07	B

(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

( 1286 )

PSA . total (ng/ mL)			
A	6.2	6.94	A
A	5.9	7.08	B

PSA . free (ng/ mL)			
A	5.6	5.03	A
A	5.4	5.07	B

( 1317 )

PSA . total (ng/ mL)			
A	6.85	6.94	A
A	6.66	7.08	B

PSA . free (ng/ mL)			
		5.03	A
		5.07	B

(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

( 1401 )

PSA . total (ng/ mL)			
A	7.61	6.94	A
A	7.58	7.08	B

PSA . free (ng/ mL)			
N	9.99	5.03	A
N	10.56	5.07	B

( 2146 )

PSA . total (ng/ mL)			
A	7.56	6.94	A
A	7.89	7.08	B

PSA . free (ng/ mL)			
W	4	5.03	A
A	4.4	5.07	B

(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

( 2240 )

PSA . total (ng/ mL)			
<b>N</b>	<b>11.97</b>	<b>6.94</b>	<b>A</b>
<b>N</b>	<b>11.69</b>	<b>7.08</b>	<b>B</b>

PSA . free (ng/ mL)			
<b>N</b>	<b>2.7</b>	<b>5.03</b>	<b>A</b>
<b>N</b>	<b>2.68</b>	<b>5.07</b>	<b>B</b>

( 3152 )

PSA . total (ng/ mL)			
<b>A</b>	<b>6.97</b>	<b>6.94</b>	<b>A</b>
<b>A</b>	<b>7.34</b>	<b>7.08</b>	<b>B</b>

PSA . free (ng/ mL)			
		<b>5.03</b>	<b>A</b>
		<b>5.07</b>	<b>B</b>

(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

( 3209 )

PSA . total (ng/ mL)			
A	6.3	6.94	A
A	6.7	7.08	B

PSA . free (ng/ mL)			
		5.03	A
		5.07	B

( 3259 )

PSA . total (ng/ mL)			
A	6.3	6.94	A
A	6.8	7.08	B

PSA . free (ng/ mL)			
		5.03	A
		5.07	B

(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

( 4154 )

PSA . total (ng/ mL)			
<b>N</b>	<b>4.37</b>	<b>6.94</b>	<b>A</b>
<b>N</b>	<b>4.57</b>	<b>7.08</b>	<b>B</b>

PSA . free (ng/ mL)			
		<b>5.03</b>	<b>A</b>
		<b>5.07</b>	<b>B</b>

( 4171 )

PSA . total (ng/ mL)			
<b>W</b>	<b>8.34</b>	<b>6.94</b>	<b>A</b>
<b>A</b>	<b>8.37</b>	<b>7.08</b>	<b>B</b>

PSA . free (ng/ mL)			
		<b>5.03</b>	<b>A</b>
		<b>5.07</b>	<b>B</b>

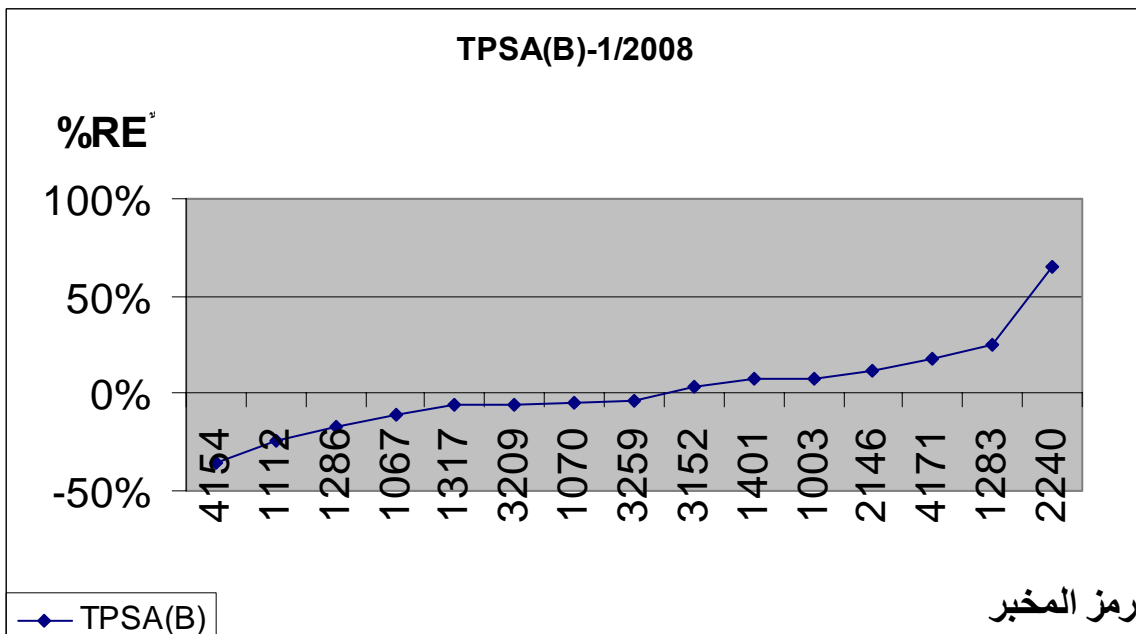
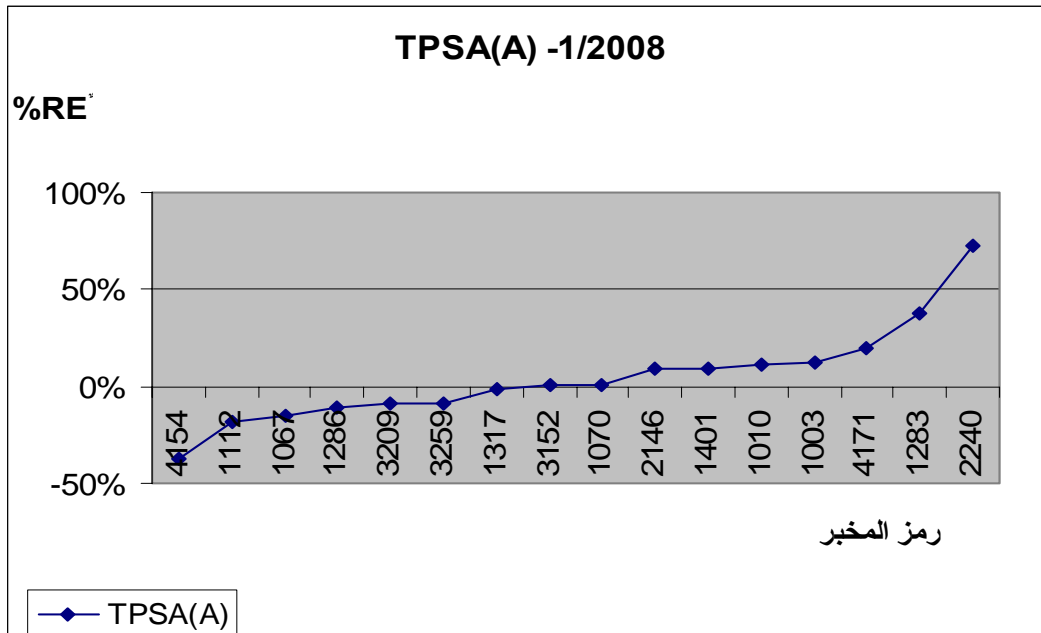
(A) Acceptable

(W) Acceptable with warning

(N) Not Acceptable

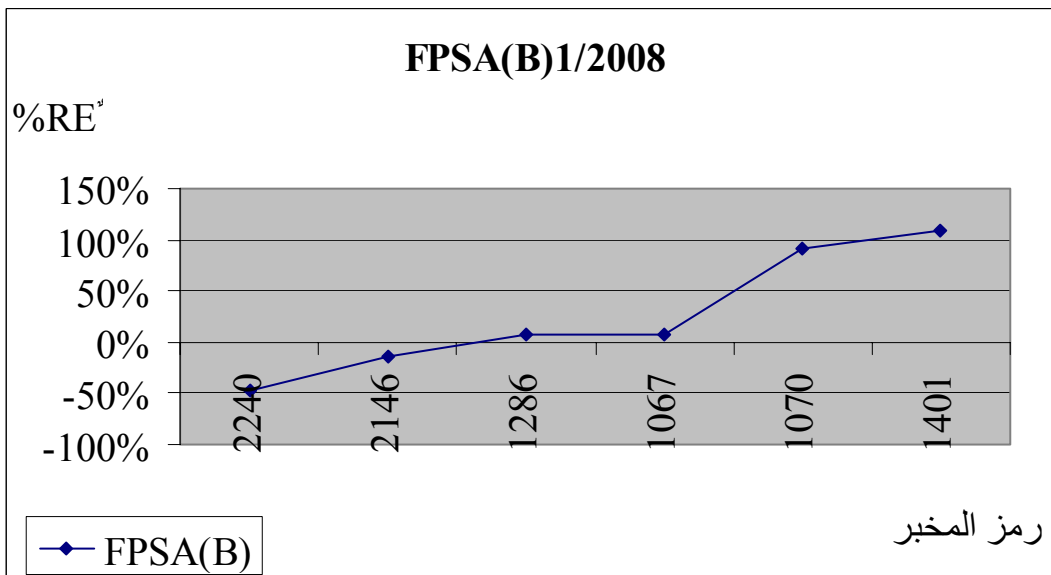
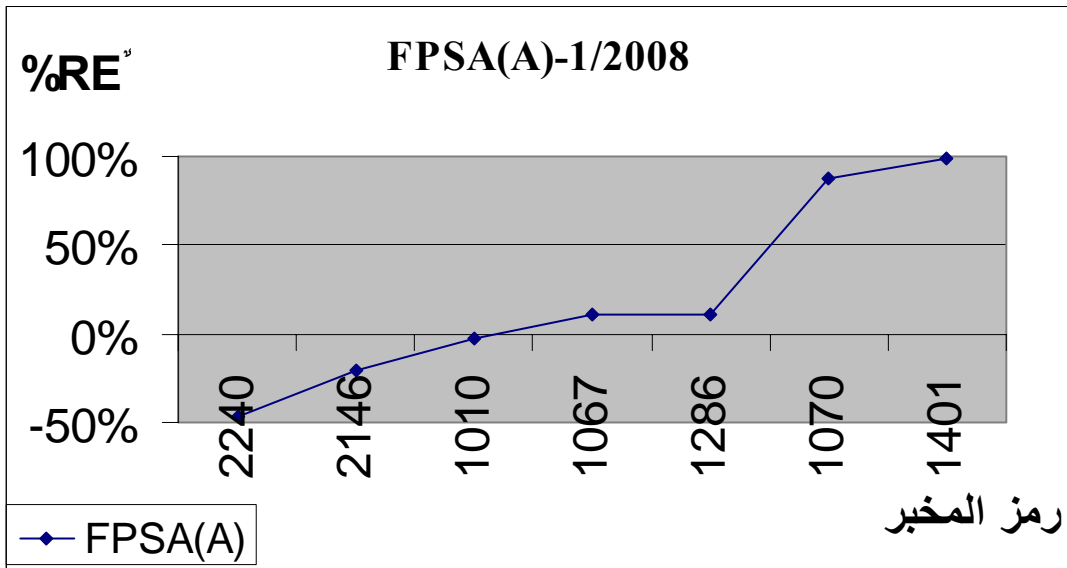
**(D)**

**RF (Histogram)**



PSA. Free

RF



: -7

:

.% 64 .1

T.PSA .2

% 13 % 6 %74 % 75

. % 13 % 19

. % 6.25 % 0

% 24 % 28 F.PSA .3

%50 % 43

43 % 0 % 14

.% 28 . % 50 %

.(F.PSA) .4

PSA ( T. F ) .5

% 43.8 F.PSA .6

% 75 :

2007

. 2008

: -8

- [1] Prescriptions Générales Concernant la Compétence des Laboratoires d'étalonnage et d'Essais- 1991- Ottawa-Ontario-Canada.
- [2] Harmonised Guidelines for Internal Quality Control in Analytical Chemistry Laboratories-1994- ISO/REMCO.
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- [4] International Soil-Analytical Exchange “ Quarterly Reports” for years from 1995 to 1999.
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- [6] Control Charts- General Guide and Introduction – ISO 7870-1993.
- [7] Control Charts for arithmetic average with warning limits–ISO 7873-1993.
- [8] Basic Statistics , James E. DE Muth , USA, 1999.