

# PT

## Prothrombin time



Code: HC00200 4 x 5 ml

Store at 2-8°C

## Prothrombin Time (PT) in plasma validation

### Intended use

The PT reagent is intended for the determination of the prothrombin time in human plasma.

For *in vitro* diagnostic use only.

For professional use only.

### Clinical significance

The Prothrombin Time (PT) or Quick Time allows the screening of coagulation abnormalities related to factor VII (extrinsic coagulation pathway) and factors II, V, X and fibrinogen (common end of coagulation pathway).

High PT values are observed in a variety of acquired conditions such as vitamin K deficiency, hepatopathy, as well as in hereditary conditions related to the coagulation system.

It's also used for the monitoring of oral anticoagulant therapy (OAT) and pre-surgical screening.

### Principle

When citrated plasma is recalcified in the presence of a high concentration of tissue factor reagent (tissue thromboplastin), the factors of the extrinsic coagulation pathway are activated; the time for the plasma to clot is then measured.

### Reagent Composition

Reagent 1 Thromboplastin	Thromboplastin, extracted from rabbit brain tissue with preservative Lyophilised
Reagent 2 Buffer	Buffer containing calcium ions and preservative

### Preparation

Bring the vials of R1 Thromboplastin and R2 Buffer at room temperature. Reconstitute one vial R1 with 1 vial R2 of the same lot. Carefully pipette any remaining from R2 into the R1 vial. Let stand for 5 minutes before swirling the vial gently in upright position a few times to mix it. Prevent contact of the fluid with the stopper. Keep the thromboplastin at 37° for at least 30 minutes until complete reconstitution.

Just before use, swirl the vial gently 5-10 times in upright position. Do not shake.

### Storage and stability

All the components of the kit are stable at 2-8°C up to the date of expiration as specified. Do not freeze!

Stability after reconstitution: 12 days at 2-8°C, 5 days at 15-19°C, 1 day at 20-25°C and 8 hours at 37°C in the original vial.

### Additional material required, not provided

- Optical or mechanical coagulation reader
- General laboratory equipment

### Precautions

- Standard guidelines for handling infectious agents and chemical reagents should be observed throughout all procedures. All reagents and contaminated waste such as patient samples and used material should be properly disposed of in accordance to the relevant national regulations.
- According to the present knowledge the reagent doesn't contain infectious agents that can be transmitted from animal to human.
- Do not use the reagent beyond the expiration date printed on the label.
- Avoid microbial contamination of the reagent or erroneous results may occur.

### Samples

**SAMPLE:** Plasma obtained from whole blood anti-coagulated with 3.2% (109 mmol/l) sodium citrate. The use of higher concentrations of sodium citrate (3.8%, 129 mmol/l) is not recommended.

**SAMPLE COLLECTION:** Immediately add nine parts of freshly collected whole blood to one part of anticoagulant.

**SAMPLE PREPARATION:** Mix the blood carefully and centrifuge the sample to obtain the plasma, place it in a test tube, keep at room temperature (20-25°C) and perform the measurement within 24 hours. Do not store the sample at 2-8°C. For longer storage times, the plasma can be kept at -20°C for up to 2 weeks. Refer to the Clinical and Laboratory Standards Institute (CLSI) guidelines H21-A5.

### Test procedure

Each sample should be tested at least twice.

- Bring the Thromboplastin reagent at 37°C for at least 15 minutes.
- Continuously stirring with a stirring bar/ball or regularly swirling of the reagent is needed to keep the reagent homogeneous during testing.
- Transfer in a cuvette:

Sample	100µl
Incubate for 2 minutes at 37°C.	
Gently swirl the vial with Thromboplastin reagent just before use and add abruptly:	
Reagent	200µl
Start the timer immediately. Measure time of clot formation.	

If using an instrument to perform this test, refer to the appropriate Instrument Operator's Manual for detailed instructions.

### Results

The result can be reported in the following units:

- Seconds: observed clotting time.

- Percentage: percentage PT values are related to the Mean normal Prothrombin Time (MNPT), being a value of 100% assigned to a prothrombin time equal to the MNPT.

- International normalized ratio (INR):

The World Health Organization (WHO) recommends the use of the International Normalized Ratio (INR) instead of reporting PT times (seconds) or percentages when monitoring patients undergoing Oral Anticoagulant Therapy. This allows the comparison of patient results that have been obtained in different laboratories where reagents with different sensitivities were used.

The INR is calculated by rising the ratio Patient PT - Mean Normal Prothrombin Time (MNPT) to the power of the reagent International Sensitivity Index (ISI), as indicated in the following formula:

$$INR = \left( \frac{\text{Patient PT}}{\text{Mean Normal PT}} \right)^{ISI}$$

The ISI is assigned by comparison to a highly sensitive WHO thromboplastin standard reference material which by definition has an ISI of 1.0.

The MNPT and ISI values for optical and mechanical readers are given in the tables included with the kit. The MNPT indicated in enclosed tables is only for information, since this parameter depends on the measuring circumstances and the local population. Therefore, every laboratory should determine its own MNPT value.

Percentages and the INRs can be obtained from the enclosed tables. The percentage can also be derived from the calibration curve, obtained as described below.

### Calibration

Use a calibrator (HC00600) to make the below listed dilutions in imidazole buffer (preferably), 0.9% saline or Owren Koller.

Dilution	---	1/2	1/3	1/4
Citrated plasma (ml)	1	1	1	1
Dilution buffer (ml)	---	1	2	3
%	P*	P/2*	P/3*	P/4*

\*P is the percentage value mentioned on the calibrator sheet.

The PT time should be determined three times for each dilution.

Plot the reciprocal of the percentage values (1/%) on the Y-axis and the clotting time (seconds) on the X-axis. A linear regression can be performed to obtain the calibration curve. If the MNPT determined by the laboratory differs clearly from the MNPT determined with the calibration curve (i.e. PT time of the 100% value), the calibration curve should be recalculated to the laboratory MNPT.

### Expected values:

Normally, the INR has values between 0.8 and 1.2.

Expected values for the prothrombin time test may vary from one laboratory to another, since it depends on several variables. These include clot detection method, temperature, pH, sample collection technique, type of anticoagulant and time and method of plasma storage. Therefore, every lab should determine its own MNPT value and reference ranges for normal patient samples. The use of icteric, lipemic, or hemolyzed samples should be avoided because of potential interference, especially when using photo-optical instruments.

### Quality control

Normal and pathological controls (HC00500) are recommended for verified measurement. Each laboratory should establish its own quality control program.

### Limitations of the procedure

- Every laboratory should determine its own MNPT value (the geometric mean of the PT of at least 20 healthy, untreated people) and reference range.
- The reporting of the results in INR is preferred over reporting in seconds and percentages as only INR has been internationally harmonized and therefore comparable between different laboratories. The results in seconds and percentage can vary considerably between different laboratories.
- It is not possible to accurately transform percentage into INR or vice versa. The supplied method-dependent International Sensitivity Index (ISI) values can be used for INR calculation provided the MNPT has been determined.
- The included tables are method specific (type of analyser, laboratory practice and conditions). In case of deviating results for percentages the laboratory should construct its own calibration curve as described above.
- Clinical diagnosis should not be made on a single test result; it should integrate clinical and other laboratory data.
- The results obtained for PT may be influenced by drugs and other interfering agents.

### References

- CLSI: Collection, transport, and Processing of Blood Specimens for Testing plasma-Based Coagulation Assays and Molecular Hemostasis Assays; Approved Guideline - Fifth Edition. CLSI document H21-A5; 28.5; 2008.
- CLSI: One-Stage Prothrombin Time (PT) Test and Activated Partial Thromboplastin Time (APTT) Test; Approved Guideline - Second Edition. CLSI document: H47-A2; 28.20; 2008.
- De Caterina R et al: Vitamin K antagonists in heart disease: Current status and perspectives (Section III). *Thromb Haemost*; 110: 1087-1107; 2013.

12.2019; Rev. 7.1



# PT

Prothrombin Time  
Temps de prothrombine

Code: HC00200 4 x 5 ml

The following tables are included:

- **Tables A:** for the calculation of the results obtained by different readers when the Mean Normal PT determined by the laboratory is similar to the Mean Normal PT determined by Cypress Diagnostics. At the top of each table you can find the **ISI and Mean Normal PT, determined by Cypress Diagnostics**, for the different kind of readers.
- **Tables B:** for the calculation of the results obtained by different readers when the **Mean Normal PT determined by the laboratory** differs clearly from the Mean Normal PT determined by Cypress Diagnostics. Each column corresponds to a different MNPT value indicated at the top row.  
Before using these tables it should be excluded that the difference in Mean Normal PT isn't caused by an incorrect sampling or test procedure.
- **Table C:** master curve with MNPT, ISI and PT(%) calibration curve as determined by Cypress Diagnostics for the programming of different coagulation readers. In case the Mean Normal PT determined by the laboratory differs clearly from the Mean Normal PT determined by Cypress Diagnostics the master curve should be recalculated to the actual MNPT.

Les tableaux suivants sont inclus:

- **Tableaux A:** pour le calcul des résultats obtenus par des différents lecteurs lorsque le TP Normal Moyen, déterminé par le laboratoire, est similaire au TP Normal Moyen déterminée par Cypress Diagnostics. En haut de chaque table, vous pouvez trouver l'**ISI et TP Normal Moyen, déterminé par Cypress Diagnostics**, pour les différents types de lecteurs.
- **Tableaux B:** pour le calcul des résultats obtenus par différents lecteurs lorsque le **TP Normal Moyen, déterminé par le laboratoire**, se distingue nettement du TP Normal Moyen déterminée par Cypress Diagnostics. Chaque colonne correspond à une valeur TP Normal Moyen différente indiquée sur la rangée supérieure.  
Avant d'utiliser ces tableaux, il devrait être exclu que la différence du TP Normal Moyen n'est pas causée par un échantillonnage ou d'une procédure de test incorrecte.
- **Tableau C:** courbe de référence avec TP Normal Moyen, ISI et la courbe d'étalonnage TP(%) déterminé par Cypress Diagnostics pour la programmation dans des différents lecteurs de coagulation.. Si le TP Normal Moyen déterminé par le laboratoire se distingue nettement du TP Normal Moyen déterminé avec la courbe d'étalonnage (c'est-à-dire le temps de TP pour la valeur de 100%), la courbe d'étalonnage doit être recalculée au TP Normal Moyen du laboratoire.



# PT

Prothrombin Time  
Temps de prothrombine

Code: HC00200 4 x 5 ml

## Table A1

CYANCoag line - Mechanical Readers Ligne CYANCoag - Lecteurs Mécaniques			
Lot 981017			
Mean Normal PT TP Normal Moyen		13.3	
ISI		1.19	
Sec	%	Ratio	INR
10.6	222.1	0.80	0.77
11.3	170.4	0.85	0.82
12.0	138.2	0.90	0.88
12.6	116.3	0.95	0.94
<b>13.3</b>	<b>100.0</b>	<b>1.00</b>	<b>1.00</b>
14.0	88.2	1.05	1.06
14.6	78.7	1.10	1.12
15.3	71.1	1.15	1.18
16.0	64.8	1.20	1.24
16.6	59.5	1.25	1.30
17.3	55.0	1.30	1.37
18.0	51.2	1.35	1.43
18.6	47.8	1.40	1.49
19.3	44.9	1.45	1.56
20.0	42.3	1.50	1.62
20.6	40.0	1.55	1.68
21.3	37.9	1.60	1.75
21.9	36.1	1.65	1.81
22.6	34.4	1.70	1.88
23.3	32.8	1.75	1.95
23.9	31.4	1.80	2.01
24.6	30.1	1.85	2.08
25.3	28.9	1.90	2.15
25.9	27.8	1.95	2.21
26.6	26.8	2.00	2.28
27.3	25.9	2.05	2.35
27.9	25.0	2.10	2.42
28.6	24.2	2.15	2.49
29.3	23.4	2.20	2.56
29.9	22.7	2.25	2.62
30.6	22.0	2.30	2.69
31.3	21.3	2.35	2.76
31.9	20.7	2.40	2.83
32.6	20.2	2.45	2.90
33.3	19.6	2.50	2.98
33.9	19.1	2.55	3.05
34.6	18.6	2.60	3.12
35.2	18.2	2.65	3.19
35.9	17.7	2.70	3.26
36.6	17.3	2.75	3.33
37.2	16.9	2.80	3.41
37.9	16.5	2.85	3.48
38.6	16.2	2.90	3.55
39.2	15.8	2.95	3.62
39.9	15.5	3.00	3.70
41.2	14.8	3.10	3.84
42.6	14.3	3.20	3.99
43.9	13.7	3.30	4.14
45.2	13.2	3.40	4.29
46.6	12.8	3.50	4.44
47.9	12.3	3.60	4.59
49.2	11.9	3.70	4.74
50.5	11.6	3.80	4.90
51.9	11.2	3.90	5.05
53.2	10.9	4.00	5.21
54.5	10.6	4.10	5.36
55.9	10.3	4.20	5.52
57.2	10.0	4.30	5.67
58.5	9.7	4.40	5.83
59.9	9.5	4.50	5.99

## Table B1

CYANCoag line - Mechanical Readers Ligne CYANCoag - Lecteurs Mécaniques									
Mean Normal PT (determined by the laboratory) TP Normal Moyen (déterminé par le laboratoire)							Lot 981017		
12.0	12.5	13.0	13.5	14.0	14.5	15.0	ISI	1.19	
Seconds depending on Mean Normal PT Secondes, en fonction de TP Normal Moyen							%	Ratio	INR
9.6	10.0	10.4	10.8	11.2	11.6	12.0	222.1	0.80	0.77
10.2	10.6	11.1	11.5	11.9	12.3	12.8	170.4	0.85	0.82
10.8	11.3	11.7	12.2	12.6	13.1	13.5	138.2	0.90	0.88
11.4	11.9	12.4	12.8	13.3	13.8	14.3	116.3	0.95	0.94
<b>12.0</b>	<b>12.5</b>	<b>13.0</b>	<b>13.5</b>	<b>14.0</b>	<b>14.5</b>	<b>15.0</b>	<b>100.0</b>	<b>1.00</b>	<b>1.00</b>
12.6	13.1	13.7	14.2	14.7	15.2	15.8	88.2	1.05	1.06
13.2	13.8	14.3	14.9	15.4	16.0	16.5	78.7	1.10	1.12
13.8	14.4	15.0	15.5	16.1	16.7	17.3	71.1	1.15	1.18
14.4	15.0	15.6	16.2	16.8	17.4	18.0	64.8	1.20	1.24
15.0	15.6	16.3	16.9	17.5	18.1	18.8	59.5	1.25	1.30
15.6	16.3	16.9	17.6	18.2	18.9	19.5	55.0	1.30	1.37
16.2	16.9	17.6	18.2	18.9	19.6	20.3	51.2	1.35	1.43
16.8	17.5	18.2	18.9	19.6	20.3	21.0	47.8	1.40	1.49
17.4	18.1	18.9	19.6	20.3	21.0	21.8	44.9	1.45	1.56
18.0	18.8	19.5	20.3	21.0	21.8	22.5	42.3	1.50	1.62
18.6	19.4	20.2	20.9	21.7	22.5	23.3	40.0	1.55	1.68
19.2	20.0	20.8	21.6	22.4	23.2	24.0	37.9	1.60	1.75
19.8	20.6	21.5	22.3	23.1	23.9	24.8	36.1	1.65	1.81
20.4	21.3	22.1	23.0	23.8	24.7	25.5	34.4	1.70	1.88
21.0	21.9	22.8	23.6	24.5	25.4	26.3	32.8	1.75	1.95
21.6	22.5	23.4	24.3	25.2	26.1	27.0	31.4	1.80	2.01
22.2	23.1	24.1	25.0	25.9	26.8	27.8	30.1	1.85	2.08
22.8	23.8	24.7	25.7	26.6	27.6	28.5	28.9	1.90	2.15
23.4	24.4	25.4	26.3	27.3	28.3	29.3	27.8	1.95	2.21
24.0	25.0	26.0	27.0	28.0	29.0	30.0	26.8	2.00	2.28
24.6	25.6	26.7	27.7	28.7	29.7	30.8	25.9	2.05	2.35
25.2	26.3	27.3	28.4	29.4	30.5	31.5	25.0	2.10	2.42
25.8	26.9	28.0	29.0	30.1	31.2	32.3	24.2	2.15	2.49
26.4	27.5	28.6	29.7	30.8	31.9	33.0	23.4	2.20	2.56
27.0	28.1	29.3	30.4	31.5	32.6	33.8	22.7	2.25	2.62
27.6	28.8	29.9	31.1	32.2	33.4	34.5	22.0	2.30	2.69
28.2	29.4	30.6	31.7	32.9	34.1	35.3	21.3	2.35	2.76
28.8	30.0	31.2	32.4	33.6	34.8	36.0	20.7	2.40	2.83
29.4	30.6	31.9	33.1	34.3	35.5	36.8	20.2	2.45	2.90
30.0	31.3	32.5	33.8	35.0	36.3	37.5	19.6	2.50	2.98
30.6	31.9	33.2	34.4	35.7	37.0	38.3	19.1	2.55	3.05
31.2	32.5	33.8	35.1	36.4	37.7	39.0	18.6	2.60	3.12
31.8	33.1	34.5	35.8	37.1	38.4	39.8	18.2	2.65	3.19
32.4	33.8	35.1	36.5	37.8	39.2	40.5	17.7	2.70	3.26
33.0	34.4	35.8	37.1	38.5	39.9	41.3	17.3	2.75	3.33
33.6	35.0	36.4	37.8	39.2	40.6	42.0	16.9	2.80	3.41
34.2	35.6	37.1	38.5	39.9	41.3	42.8	16.5	2.85	3.48
34.8	36.3	37.7	39.2	40.6	42.1	43.5	16.2	2.90	3.55
35.4	36.9	38.4	39.8	41.3	42.8	44.3	15.8	2.95	3.62
36.0	37.5	39.0	40.5	42.0	43.5	45.0	15.5	3.00	3.70
37.2	38.8	40.3	41.9	43.4	45.0	46.5	14.8	3.10	3.84
38.4	40.0	41.6	43.2	44.8	46.4	48.0	14.3	3.20	3.99
39.6	41.3	42.9	44.6	46.2	47.9	49.5	13.7	3.30	4.14
40.8	42.5	44.2	45.9	47.6	49.3	51.0	13.2	3.40	4.29
42.0	43.8	45.5	47.3	49.0	50.8	52.5	12.8	3.50	4.44
43.2	45.0	46.8	48.6	50.4	52.2	54.0	12.3	3.60	4.59
44.4	46.3	48.1	50.0	51.8	53.7	55.5	11.9	3.70	4.74
45.6	47.5	49.4	51.3	53.2	55.1	57.0	11.6	3.80	4.90
46.8	48.8	50.7	52.7	54.6	56.6	58.5	11.2	3.90	5.05
48.0	50.0	52.0	54.0	56.0	58.0	60.0	10.9	4.00	5.21
49.2	51.3	53.3	55.4	57.4	59.5	61.5	10.6	4.10	5.36
50.4	52.5	54.6	56.7	58.8	60.9	63.0	10.3	4.20	5.52
51.6	53.8	55.9	58.1	60.2	62.4	64.5	10.0	4.30	5.67
52.8	55.0	57.2	59.4	61.6	63.8	66.0	9.7	4.40	5.83
54.0	56.3	58.5	60.8	63.0	65.3	67.5	9.5	4.50	5.99



# PT

Prothrombin Time  
Temps de prothrombine

Code: HC00200 4 x 5 ml

## Table A2

Sysmex CA line - Optical Readers Ligne Sysmex CA - Lecteurs Optiques			
Lot 981017			
Mean Normal PT TP Normal Moyen		12.2	
ISI		1.18	
Sec	%	Ratio	INR
9.8	182.5	0.80	0.77
10.4	151.3	0.85	0.83
11.0	129.3	0.90	0.88
11.6	112.8	0.95	0.94
<b>12.2</b>	<b>100.0</b>	<b>1.00</b>	<b>1.00</b>
12.8	89.9	1.05	1.06
13.4	81.6	1.10	1.12
14.0	74.7	1.15	1.18
14.6	68.9	1.20	1.24
15.3	63.9	1.25	1.30
15.9	59.6	1.30	1.36
16.5	55.9	1.35	1.42
17.1	52.6	1.40	1.49
17.7	49.6	1.45	1.55
18.3	47.0	1.50	1.61
18.9	44.6	1.55	1.68
19.5	42.5	1.60	1.74
20.1	40.5	1.65	1.81
20.7	38.8	1.70	1.87
21.4	37.1	1.75	1.94
22.0	35.6	1.80	2.00
22.6	34.3	1.85	2.07
23.2	33.0	1.90	2.13
23.8	31.8	1.95	2.20
24.4	30.7	2.00	2.27
25.0	29.7	2.05	2.33
25.6	28.7	2.10	2.40
26.2	27.8	2.15	2.47
26.8	27.0	2.20	2.54
27.5	26.2	2.25	2.60
28.1	25.4	2.30	2.67
28.7	24.7	2.35	2.74
29.3	24.0	2.40	2.81
29.9	23.4	2.45	2.88
30.5	22.8	2.50	2.95
31.1	22.2	2.55	3.02
31.7	21.7	2.60	3.09
32.3	21.2	2.65	3.16
32.9	20.7	2.70	3.23
33.6	20.2	2.75	3.30
34.2	19.8	2.80	3.37
34.8	19.3	2.85	3.44
35.4	18.9	2.90	3.51
36.0	18.5	2.95	3.58
36.6	18.1	3.00	3.66
37.8	17.4	3.10	3.80
39.0	16.8	3.20	3.95
40.3	16.1	3.30	4.09
41.5	15.6	3.40	4.24
42.7	15.1	3.50	4.39
43.9	14.6	3.60	4.53
45.1	14.1	3.70	4.68
46.4	13.7	3.80	4.83
47.6	13.3	3.90	4.98
48.8	12.9	4.00	5.13
50.0	12.5	4.10	5.29
51.2	12.2	4.20	5.44
52.5	11.8	4.30	5.59
53.7	11.5	4.40	5.74
54.9	11.2	4.50	5.90

## Table B2

Sysmex CA line - Optical Readers Ligne Sysmex CA - Lecteurs Optiques									
Mean Normal PT (determined by the laboratory) TP Normal Moyen (déterminé par le laboratoire)							Lot 981017		
12.0	12.5	13.0	13.5	14.0	14.5	15.0	ISI	1.18	
Seconds, depending on Mean Normal PT Secondes, en fonction de TP Normal Moyen							%	Ratio	INR
9.6	10.0	10.4	10.8	11.2	11.6	12.0	182.5	0.80	0.77
10.2	10.6	11.1	11.5	11.9	12.3	12.8	151.3	0.85	0.83
10.8	11.3	11.7	12.2	12.6	13.1	13.5	129.3	0.90	0.88
11.4	11.9	12.4	12.8	13.3	13.8	14.3	112.8	0.95	0.94
<b>12.0</b>	<b>12.5</b>	<b>13.0</b>	<b>13.5</b>	<b>14.0</b>	<b>14.5</b>	<b>15.0</b>	<b>100.0</b>	<b>1.00</b>	<b>1.00</b>
12.6	13.1	13.7	14.2	14.7	15.2	15.8	89.9	1.05	1.06
13.2	13.8	14.3	14.9	15.4	16.0	16.5	81.6	1.10	1.12
13.8	14.4	15.0	15.5	16.1	16.7	17.3	74.7	1.15	1.18
14.4	15.0	15.6	16.2	16.8	17.4	18.0	68.9	1.20	1.24
15.0	15.6	16.3	16.9	17.5	18.1	18.8	63.9	1.25	1.30
15.6	16.3	16.9	17.6	18.2	18.9	19.5	59.6	1.30	1.36
16.2	16.9	17.6	18.2	18.9	19.6	20.3	55.9	1.35	1.42
16.8	17.5	18.2	18.9	19.6	20.3	21.0	52.6	1.40	1.49
17.4	18.1	18.9	19.6	20.3	21.0	21.8	49.6	1.45	1.55
18.0	18.8	19.5	20.3	21.0	21.8	22.5	47.0	1.50	1.61
18.6	19.4	20.2	20.9	21.7	22.5	23.3	44.6	1.55	1.68
19.2	20.0	20.8	21.6	22.4	23.2	24.0	42.5	1.60	1.74
19.8	20.6	21.5	22.3	23.1	23.9	24.8	40.5	1.65	1.81
20.4	21.3	22.1	23.0	23.8	24.7	25.5	38.8	1.70	1.87
21.0	21.9	22.8	23.6	24.5	25.4	26.3	37.1	1.75	1.94
21.6	22.5	23.4	24.3	25.2	26.1	27.0	35.6	1.80	2.00
22.2	23.1	24.1	25.0	25.9	26.8	27.8	34.3	1.85	2.07
22.8	23.8	24.7	25.7	26.6	27.6	28.5	33.0	1.90	2.13
23.4	24.4	25.4	26.3	27.3	28.3	29.3	31.8	1.95	2.20
24.0	25.0	26.0	27.0	28.0	29.0	30.0	30.7	2.00	2.27
24.6	25.6	26.7	27.7	28.7	29.7	30.8	29.7	2.05	2.33
25.2	26.3	27.3	28.4	29.4	30.5	31.5	28.7	2.10	2.40
25.8	26.9	28.0	29.0	30.1	31.2	32.3	27.8	2.15	2.47
26.4	27.5	28.6	29.7	30.8	31.9	33.0	27.0	2.20	2.54
27.0	28.1	29.3	30.4	31.5	32.6	33.8	26.2	2.25	2.60
27.6	28.8	29.9	31.1	32.2	33.4	34.5	25.4	2.30	2.67
28.2	29.4	30.6	31.7	32.9	34.1	35.3	24.7	2.35	2.74
28.8	30.0	31.2	32.4	33.6	34.8	36.0	24.0	2.40	2.81
29.4	30.6	31.9	33.1	34.3	35.5	36.8	23.4	2.45	2.88
30.0	31.3	32.5	33.8	35.0	36.3	37.5	22.8	2.50	2.95
30.6	31.9	33.2	34.4	35.7	37.0	38.3	22.2	2.55	3.02
31.2	32.5	33.8	35.1	36.4	37.7	39.0	21.7	2.60	3.09
31.8	33.1	34.5	35.8	37.1	38.4	39.8	21.2	2.65	3.16
32.4	33.8	35.1	36.5	37.8	39.2	40.5	20.7	2.70	3.23
33.0	34.4	35.8	37.1	38.5	39.9	41.3	20.2	2.75	3.30
33.6	35.0	36.4	37.8	39.2	40.6	42.0	19.8	2.80	3.37
34.2	35.6	37.1	38.5	39.9	41.3	42.8	19.3	2.85	3.44
34.8	36.3	37.7	39.2	40.6	42.1	43.5	18.9	2.90	3.51
35.4	36.9	38.4	39.8	41.3	42.8	44.3	18.5	2.95	3.58
36.0	37.5	39.0	40.5	42.0	43.5	45.0	18.1	3.00	3.66
37.2	38.8	40.3	41.9	43.4	45.0	46.5	17.4	3.10	3.80
38.4	40.0	41.6	43.2	44.8	46.4	48.0	16.8	3.20	3.95
39.6	41.3	42.9	44.6	46.2	47.9	49.5	16.1	3.30	4.09
40.8	42.5	44.2	45.9	47.6	49.3	51.0	15.6	3.40	4.24
42.0	43.8	45.5	47.3	49.0	50.8	52.5	15.1	3.50	4.39
43.2	45.0	46.8	48.6	50.4	52.2	54.0	14.6	3.60	4.53
44.4	46.3	48.1	50.0	51.8	53.7	55.5	14.1	3.70	4.68
45.6	47.5	49.4	51.3	53.2	55.1	57.0	13.7	3.80	4.83
46.8	48.8	50.7	52.7	54.6	56.6	58.5	13.3	3.90	4.98
48.0	50.0	52.0	54.0	56.0	58.0	60.0	12.9	4.00	5.13
49.2	51.3	53.3	55.4	57.4	59.5	61.5	12.5	4.10	5.29
50.4	52.5	54.6	56.7	58.8	60.9	63.0	12.2	4.20	5.44
51.6	53.8	55.9	58.1	60.2	62.4	64.5	11.8	4.30	5.59
52.8	55.0	57.2	59.4	61.6	63.8	66.0	11.5	4.40	5.74
54.0	56.3	58.5	60.8	63.0	65.3	67.5	11.2	4.50	5.90



# PT

Prothrombin Time  
Temps de prothrombine

Code: HC00200 4 x 5 ml

## Table A3

Stago line - Mechanical Readers Ligne Stago - Lecteurs Mécaniques			
Lot 981017			
Mean Normal PT TP Normal Moyen		13.5	
ISI		1.23	
Sec	%	Ratio	INR
10.8	173.3	0.80	0.76
11.5	146.9	0.85	0.82
12.2	127.4	0.90	0.88
12.8	112.5	0.95	0.94
<b>13.5</b>	<b>100.0</b>	<b>1.00</b>	<b>1.00</b>
14.2	91.2	1.05	1.06
14.9	83.3	1.10	1.12
15.5	76.7	1.15	1.19
16.2	71.0	1.20	1.25
16.9	66.2	1.25	1.32
17.6	61.9	1.30	1.38
18.2	58.2	1.35	1.45
18.9	54.9	1.40	1.51
19.6	51.9	1.45	1.58
20.3	49.2	1.50	1.65
20.9	46.8	1.55	1.71
21.6	44.7	1.60	1.78
22.3	42.7	1.65	1.85
23.0	40.9	1.70	1.92
23.6	39.2	1.75	1.99
24.3	37.7	1.80	2.06
25.0	36.3	1.85	2.13
25.7	34.9	1.90	2.20
26.3	33.7	1.95	2.27
27.0	32.6	2.00	2.35
27.7	31.5	2.05	2.42
28.4	30.5	2.10	2.49
29.0	29.6	2.15	2.56
29.7	28.7	2.20	2.64
30.4	27.9	2.25	2.71
31.1	27.1	2.30	2.79
31.7	26.3	2.35	2.86
32.4	25.6	2.40	2.94
33.1	25.0	2.45	3.01
33.8	24.3	2.50	3.09
34.4	23.7	2.55	3.16
35.1	23.2	2.60	3.24
35.8	22.6	2.65	3.32
36.5	22.1	2.70	3.39
37.1	21.6	2.75	3.47
37.8	21.1	2.80	3.55
38.5	20.7	2.85	3.63
39.2	20.3	2.90	3.70
39.8	19.8	2.95	3.78
40.5	19.4	3.00	3.86
41.9	18.7	3.10	4.02
43.2	18.0	3.20	4.18
44.6	17.3	3.30	4.34
45.9	16.7	3.40	4.51
47.3	16.2	3.50	4.67
48.6	15.6	3.60	4.83
50.0	15.2	3.70	5.00
51.3	14.7	3.80	5.17
52.7	14.3	3.90	5.33
54.0	13.8	4.00	5.50
55.4	13.5	4.10	5.67
56.7	13.1	4.20	5.84
58.1	12.7	4.30	6.01
59.4	12.4	4.40	6.19
60.8	12.1	4.50	6.36

## Table B3

Stago line - Mechanical Readers Ligne Stago - Lecteurs Mécaniques									
Mean Normal PT (determined by the laboratory) TP Normal Moyen (déterminé par le laboratoire)							Lot 981017		
12.0	12.5	13.0	13.5	14.0	14.5	15.0	ISI	1.23	
Seconds depending on Mean Normal PT Secondes, en fonction de TP Normal Moyen							%	Ratio	INR
9.6	10.0	10.4	10.8	11.2	11.6	12.0	173.3	0.80	0.76
10.2	10.6	11.1	11.5	11.9	12.3	12.8	146.9	0.85	0.82
10.8	11.3	11.7	12.2	12.6	13.1	13.5	127.4	0.90	0.88
11.4	11.9	12.4	12.8	13.3	13.8	14.3	112.5	0.95	0.94
<b>12.0</b>	<b>12.5</b>	<b>13.0</b>	<b>13.5</b>	<b>14.0</b>	<b>14.5</b>	<b>15.0</b>	<b>100.0</b>	<b>1.00</b>	<b>1.00</b>
12.6	13.1	13.7	14.2	14.7	15.2	15.8	91.2	1.05	1.06
13.2	13.8	14.3	14.9	15.4	16.0	16.5	83.3	1.10	1.12
13.8	14.4	15.0	15.5	16.1	16.7	17.3	76.7	1.15	1.19
14.4	15.0	15.6	16.2	16.8	17.4	18.0	71.0	1.20	1.25
15.0	15.6	16.3	16.9	17.5	18.1	18.8	66.2	1.25	1.32
15.6	16.3	16.9	17.6	18.2	18.9	19.5	61.9	1.30	1.38
16.2	16.9	17.6	18.2	18.9	19.6	20.3	58.2	1.35	1.45
16.8	17.5	18.2	18.9	19.6	20.3	21.0	54.9	1.40	1.51
17.4	18.1	18.9	19.6	20.3	21.0	21.8	51.9	1.45	1.58
18.0	18.8	19.5	20.3	21.0	21.8	22.5	49.2	1.50	1.65
18.6	19.4	20.2	20.9	21.7	22.5	23.3	46.8	1.55	1.71
19.2	20.0	20.8	21.6	22.4	23.2	24.0	44.7	1.60	1.78
19.8	20.6	21.5	22.3	23.1	23.9	24.8	42.7	1.65	1.85
20.4	21.3	22.1	23.0	23.8	24.7	25.5	40.9	1.70	1.92
21.0	21.9	22.8	23.6	24.5	25.4	26.3	39.2	1.75	1.99
21.6	22.5	23.4	24.3	25.2	26.1	27.0	37.7	1.80	2.06
22.2	23.1	24.1	25.0	25.9	26.8	27.8	36.3	1.85	2.13
22.8	23.8	24.7	25.7	26.6	27.6	28.5	34.9	1.90	2.20
23.4	24.4	25.4	26.3	27.3	28.3	29.3	33.7	1.95	2.27
24.0	25.0	26.0	27.0	28.0	29.0	30.0	32.6	2.00	2.35
24.6	25.6	26.7	27.7	28.7	29.7	30.8	31.5	2.05	2.42
25.2	26.3	27.3	28.4	29.4	30.5	31.5	30.5	2.10	2.49
25.8	26.9	28.0	29.0	30.1	31.2	32.3	29.6	2.15	2.56
26.4	27.5	28.6	29.7	30.8	31.9	33.0	28.7	2.20	2.64
27.0	28.1	29.3	30.4	31.5	32.6	33.8	27.9	2.25	2.71
27.6	28.8	29.9	31.1	32.2	33.4	34.5	27.1	2.30	2.79
28.2	29.4	30.6	31.7	32.9	34.1	35.3	26.3	2.35	2.86
28.8	30.0	31.2	32.4	33.6	34.8	36.0	25.6	2.40	2.94
29.4	30.6	31.9	33.1	34.3	35.5	36.8	25.0	2.45	3.01
30.0	31.3	32.5	33.8	35.0	36.3	37.5	24.3	2.50	3.09
30.6	31.9	33.2	34.4	35.7	37.0	38.3	23.7	2.55	3.16
31.2	32.5	33.8	35.1	36.4	37.7	39.0	23.2	2.60	3.24
31.8	33.1	34.5	35.8	37.1	38.4	39.8	22.6	2.65	3.32
32.4	33.8	35.1	36.5	37.8	39.2	40.5	22.1	2.70	3.39
33.0	34.4	35.8	37.1	38.5	39.9	41.3	21.6	2.75	3.47
33.6	35.0	36.4	37.8	39.2	40.6	42.0	21.1	2.80	3.55
34.2	35.6	37.1	38.5	39.9	41.3	42.8	20.7	2.85	3.63
34.8	36.3	37.7	39.2	40.6	42.1	43.5	20.3	2.90	3.70
35.4	36.9	38.4	39.8	41.3	42.8	44.3	19.8	2.95	3.78
36.0	37.5	39.0	40.5	42.0	43.5	45.0	19.4	3.00	3.86
37.2	38.8	40.3	41.9	43.4	45.0	46.5	18.7	3.10	4.02
38.4	40.0	41.6	43.2	44.8	46.4	48.0	18.0	3.20	4.18
39.6	41.3	42.9	44.6	46.2	47.9	49.5	17.3	3.30	4.34
40.8	42.5	44.2	45.9	47.6	49.3	51.0	16.7	3.40	4.51
42.0	43.8	45.5	47.3	49.0	50.8	52.5	16.2	3.50	4.67
43.2	45.0	46.8	48.6	50.4	52.2	54.0	15.6	3.60	4.83
44.4	46.3	48.1	50.0	51.8	53.7	55.5	15.2	3.70	5.00
45.6	47.5	49.4	51.3	53.2	55.1	57.0	14.7	3.80	5.17
46.8	48.8	50.7	52.7	54.6	56.6	58.5	14.3	3.90	5.33
48.0	50.0	52.0	54.0	56.0	58.0	60.0	13.8	4.00	5.50
49.2	51.3	53.3	55.4	57.4	59.5	61.5	13.5	4.10	5.67
50.4	52.5	54.6	56.7	58.8	60.9	63.0	13.1	4.20	5.84
51.6	53.8	55.9	58.1	60.2	62.4	64.5	12.7	4.30	6.01
52.8	55.0	57.2	59.4	61.6	63.8	66.0	12.4	4.40	6.19
54.0	56.3	58.5	60.8	63.0	65.3	67.5	12.1	4.50	6.36



# PT

Prothrombin Time  
Temps de prothrombine

Code: HC00200 4 x 5 ml

## Table C

<b>MASTER CURVE</b>			
<b>COURBE DE RÉFÉRENCE</b>			
<b>Lot 981017</b>			
		<b>%</b>	<b>sec</b>
<b>CYANCoag line - Mechanical Readers</b> <b>Ligne CYANCoag - Lecteurs Mécaniques</b>	<b>ISI</b>	100	13.3
	1.19	50	18.2
	<b>MNPT</b>	33	23.2
	13.3	25	27.9
		<b>%</b>	<b>sec</b>
<b>Sysmex CA line - Optical Readers</b> <b>Ligne Sysmex CA - Lecteurs Optiques</b>	<b>ISI</b>	100	12.2
	1.18	50	17.6
	<b>MNPT</b>	33	23.2
	12.2	25	28.4
		<b>%</b>	<b>sec</b>
<b>Stago line - Mechanical Readers</b> <b>Ligne Stago - Lecteurs Mécaniques</b>	<b>ISI</b>	100	13.5
	1.23	50	20.2
	<b>MNPT</b>	33	26.6
	13.5	25	33.1

