

Appendix 1: Questionnaire (English translation)

Questionnaire NT-proBNP study

Section 1/17

Dear Colleague,

In recent months, you have had the opportunity to work with Cobas h232, a point-of-care test for NT-proBNP designed by Roche. Thank you for your cooperation with the implementation of this POC test in your practice.

The second part of the study consists of a survey, which is presented to you now. From this survey, we would like to determine to what extent the test lived up to your expectations. Particularly, we are interested in the user-friendliness and usefulness of this test for your practice.

This survey assesses all elements of the legal framework of POC testing, concerning the role of the point-of-care coordinator, organization of training for users of the test, quality control, validation by means of a control test and connectivity between practice and the reference laboratory. During this study, all of these factors were examined to determine what works and what could be improved.

Thank you in advance for your cooperation.

Dr. Chiel Hex

Promotor Dr. Bert Vaes

Co-promoter Dr. Jan Verbakel

Dr. Miek Smeets, Prof Dr. Frank Buntinx

* mandatory



Section 2/17: Identification

I would like to ask you to identify yourself to know whether you have already answered the questionnaire so I do not have to bother you with reminder emails.

I assure you that your data will be processed anonymously. Neither the researchers at KU Leuven nor the employees of Roche or ZOL will be able to link the answers to your identity. They only have access to the results after the collected data is encoded.

Question 1: What is your name? *

Section 3/17: Participation kick-off / training

During this study, several training sessions were organized.

In the run-up to the study, you were invited to participate in one of the kick-off events at ZOL Genk or the Diagnosecentrum in Lommel. Afterwards, we came to your practice for a hands-on training. Can you indicate below what you think of this training?

Question 2: Was everything you needed to use the device correctly discussed during the training sessions? *

Mark only one answer per row.

	Totally disagree	Partially disagree	Neutral	Partially agree	Totally agree	Did not attend training
The theoretical background of the test was clearly explained so I could interpret the test result	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The explanation of the practical use was sufficient to be able to use the device	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 3: What could have been done better during training?

Section 4/17: Active participation in the study?

At the start of the study, we hoped that all GPs would actively participate in the study. It may, of course, be that during the period of the study, you did not manage to carry out tests for any reason. For the evaluation of this questionnaire, it is useful to know whether you performed any tests.

Question 4: Did you perform at least one test (as an individual physician) or did your assistant/nurse carry out at least one test? *

Mark only one answer per row.

- ☐ Yes *Go to question 5.*
☐ No *Go to question 6.*

Section 5/17: NT-proBNP: sense of competence

Prior to the study, we asked you to indicate how skilled you felt at interpreting a NT-proBNP result. We now repeat the question to determine whether this has changed after the study.

Question 5: How skilled at evaluating the NT-proBNP result do you feel? *

	1	2	3	4	5	6	7	8	9	10	
Totally unskilled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Totally skilled

Go to question 9 (non-users: only answer sections 6 to 8; users: continue to section 9)

Section 6/17: Non-users

It is unfortunate that you could not or did not want to use the device. We would like to ask you some questions about this.

Question 6: What is the main reason for which you did not use the test? *

- ☐ The test procedure is too complicated *Go to question 8.*
☐ The test procedure takes too much time *Go to question 8.*
☐ I did not have interest in this NT-proBNP study *Go to question 8.*

- ☐ I do not think about the availability of this test
- ☐ Another reason

Go to question 7.
Go to question 8.

Section 7/17 (non-users):

As the main reason for not using the test, you answered that you did not think about it.
 We would like to identify the specific reason for this.

Question 7: Why did you not think about using the test? You may select more than one answer. *

Check all the relevant options.

- ☐ I do not think that I have patients who are eligible for this test
- ☐ My practice is too busy
- ☐ It is not in my routine
- ☐ I do not see the value of the test
- ☐ Another reason

Section 8/17 (non-users): Room for improvement? (Section non-users)

We would like to hear your ideas for possible improvements.

Question 8: What should be done in order for you to use this device? *

Non-users: go to the end of the survey

Section 9/17 (users): Active users

We are happy to hear that you used this test.

Would like to ask you a few questions about how you evaluated the use of the device. It is important to know whether you used the device at least once yourself or only outsourced it to your practice nurse or assistant.

Question 9: Did you use the device at least once yourself or did your assistant/nurse carry out the test?

Mark only one answer.

- ☐ At least once I used the device myself
- ☐ Always carried out by a nurse/assistant

Section 10/17 (users): User-friendliness (usability)

In this section, we are particularly interested in determining how user-friendly the device is for you.

Question 10: What do you think of the following aspects of the user-friendliness of the device?

*

Mark only one answer per row.

	<i>Totally disagree</i>	<i>Partially disagree</i>	<i>Neutral</i>	<i>Partially agree</i>	<i>Totally agree</i>
<i>Using the device is easy</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>The device is quick to use</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>The sampling is simple</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Application of the sample on the device is easy</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 13/17: Role of the POC coordinator

During the study, you were able to contact our POC coordinator, Cindy Verwichte, at the lab of ZOL Genk at any time. We would like to evaluate your experience.

Question 14: What is your opinion about the role of the POC coordinator? *

Mark only one answer per row.

	<i>Totally disagree</i>	<i>Partially disagree</i>	<i>Neutral</i>	<i>Partially agree</i>	<i>Totally agree</i>
<i>The POC coordinator was always able to be reached</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>The POC coordinator was able to answer your questions</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>The POC coordinator offered solutions to your problems</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 14/17: Connectivity

One of the important pillars of the legal framework of POC testing is the connectivity between the device in practice and reference laboratory. The connection is very important in both directions. In essence, we would like to ask whether the result of the rapid test was sent to the laboratory and whether the result of the control sample was entered into your patient records. Again, we would like to hear about your experience.

Question 15: What is your opinion about the connectivity? *

Mark only one answer per row.

	<i>Totally disagree</i>	<i>Partially disagree</i>	<i>Neutral</i>	<i>Partially agree</i>	<i>Totally agree</i>
<i>The connection was stable (the green light was always on)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>The result of the control sample was always sent to the patient record</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 15/17: Indication of the POC test

Question 16: Can you rank the following indications in terms of importance? *

Mark only one answer per column.

<i>In terms of importance</i>	<i>first indication</i>	<i>second indication</i>	<i>third indication</i>	<i>fourth indication</i>	<i>fifth indication</i>
<i>Diagnostic uncertainty</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Case-finding in patients with cardiovascular risk</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Prognosis in known heart failure</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Follow-up in the treatment of heart failure</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Another indication; you can specify this in a moment</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 17: What are the other indications?

Section 16/17: Some open questions to conclude

In this section, we would like to give you the opportunity to freely express your opinion about the device. We assess both the strengths and weaknesses. Of course, we realize that answering open questions requires some effort, but your opinion is very much appreciated.

Question 18: What are the strengths of this device? *

Question 19: What are the shortcomings of this device? *

Question 20: Which lab test would you use as a POC test in your practice?

Section 17/17: Thank you for your participation

The team from the University of Leuven, ZOL Genk, Roche and I thank you for your cooperation. Please, do not forget to return your completed questionnaire. Thank you.