LABQUALITY

External Quality Assessment Scheme

ECG, interpretation
Round 2, 2022

Specimens
3 digital ECG registrations (images) S001, S002 and S003 are available in LabScala. Patient's age and sex are given.

In order to print the images, you must log in to the round in LabScala and go to "Print instructions". There you can find an instruction letter, with the attached pictures to be printed in pdf format. You can print the ECG registrations first and come back later to answer the form.

Parameters
ECG interpretation.

Result reporting
Please enter the results via LabScala (www.labscala.com). The round will be open 3.10.2022.

2022-10-03

INSTRUCTIONS

Product no: 7130
LQ703122021-23/FI

Subcontracting: Sample preparation

The results should be reported no later than **October 24, 2022.**

Inquiries
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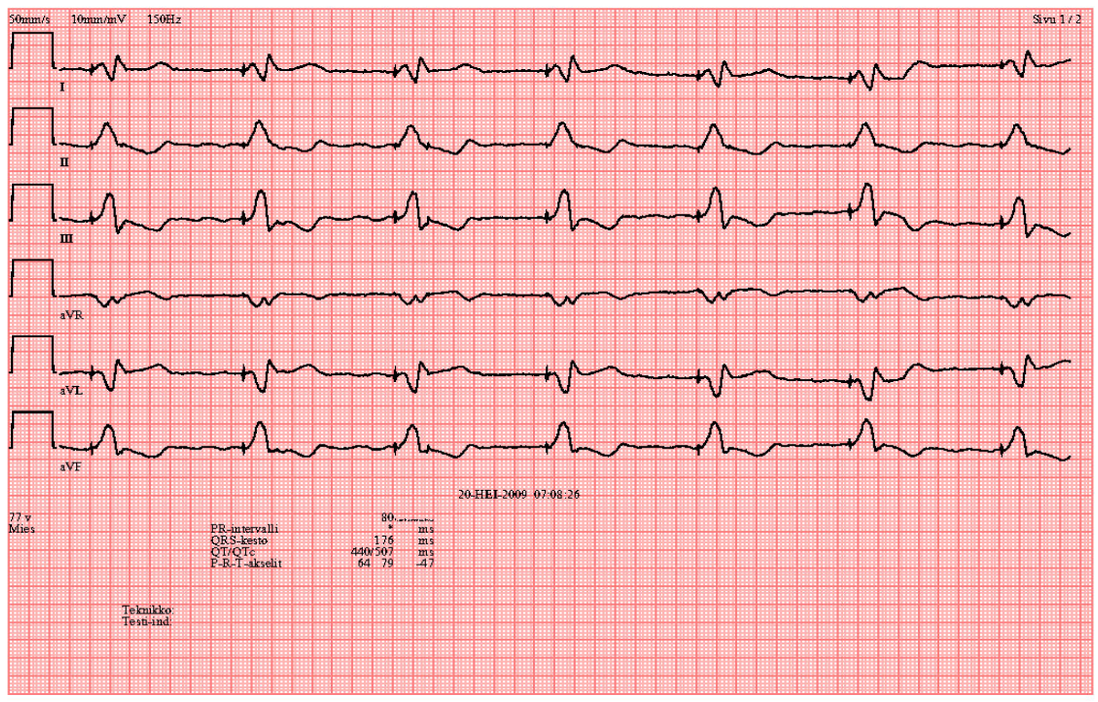
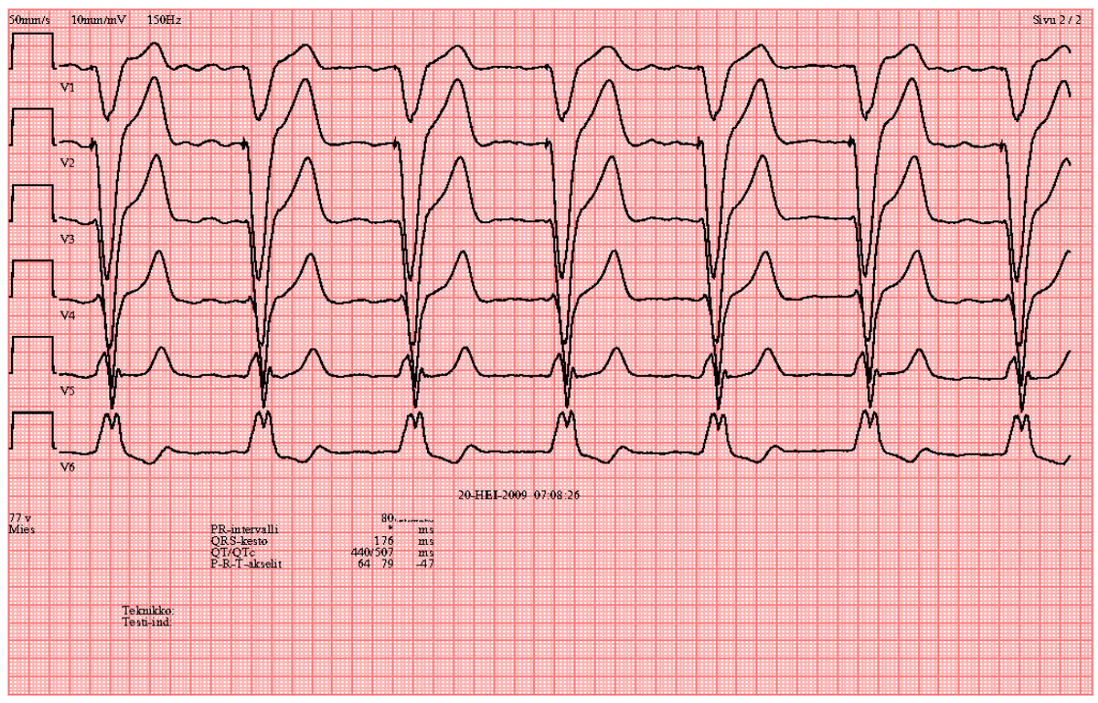
Sample S001

Result - Technical quality?	n
Baseline wander	1
Good quality recording	18
Noise originating from the patient	3
Total	**22**

Result - Findings according to the person who performed the EKG?	n
Atrial fibrillation or atrial flutter	6
Bradycardia / tachycardia	1
Electronic pacemaker	21
Left bundle branch block	15
Right bundle branch block	2
ST-segment changes	3
Ventricular rhythm	1
Total	**49**

Result - Clinicians interpretation	n
Atrial fibrillation or atrial flutter	1
Electronic pacemaker	6
Left bundle branch block	4
Right bundle branch block	1
ST-segment changes	2
Total	**14**





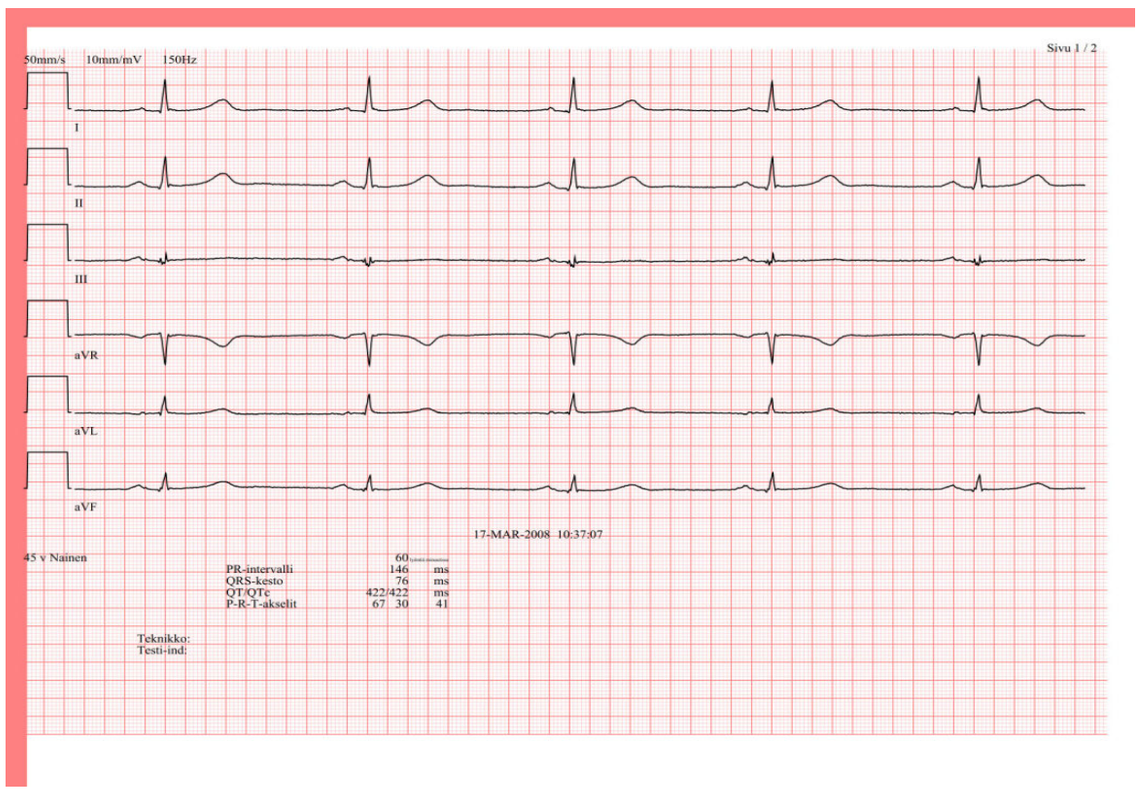
The technical quality of the recording is good. There is a regular broad-complex rhythm with a frequency of 80/min. Just before the ventricular complex (QRS), a pacemaker activation is visible, most clearly in the limb leads, meaning that the prevailing rhythm is ventricular pacing. In relation to ventricular pacing, the order of activation is different from the norm and therefore the QRS complex is wide and explains changes in the T wave. No regular atrial activation is visible, but the baseline is irregular between ventricular complexes. At the atrial level, in this case, the rhythm of atrial fibrillation prevails.
Things to note: The determination of the atrial rhythm is easily forgotten when examining a ventricular paced ECG. Atrial fibrillation rhythm is more difficult to detect because the irregularity of rhythm characteristic of atrial fibrillation is absent, while the ventricular rhythm is regular due to the pacemaker rhythm.

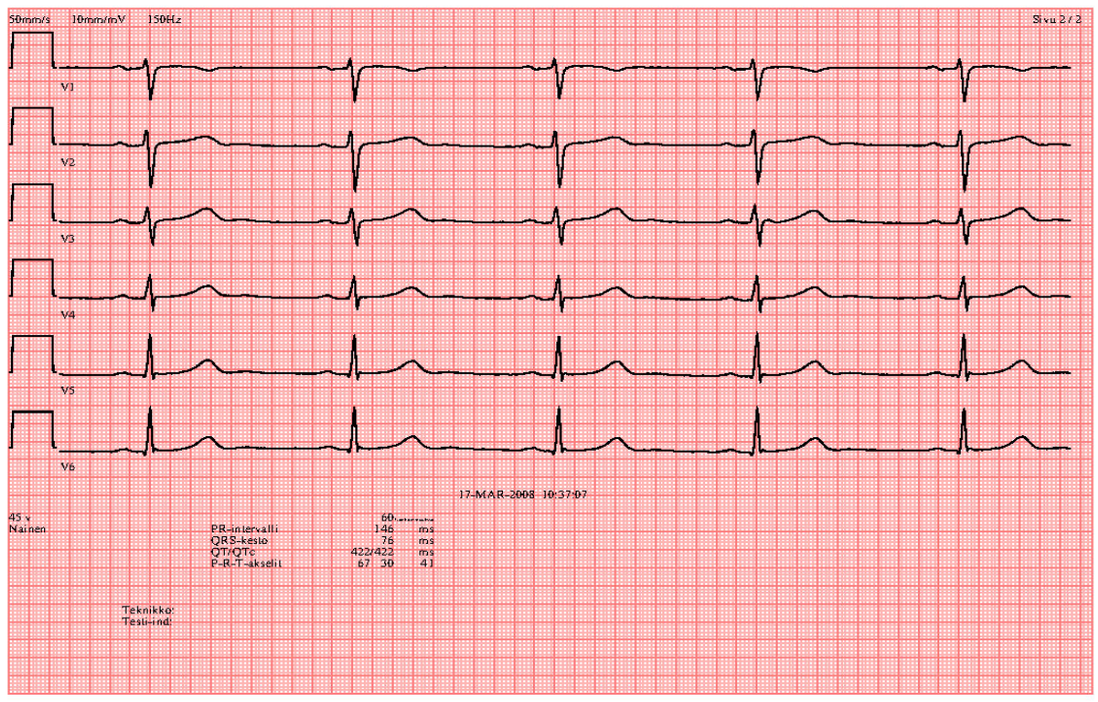
Sample S002

Result - Technical quality?	n
Good quality recording	20
Misplaced or wrongly attached leads	2
Total	**22**

Result - Findings according to the person who performed the EKG?	n
Bradycardia / tachycardia	1
Normal finding, regular sinus rhythm	22
ST-segment changes	1
Total	**24**

Result - Clinicians interpretation	n
Normal finding, regular sinus rhythm	6
Total	**6**





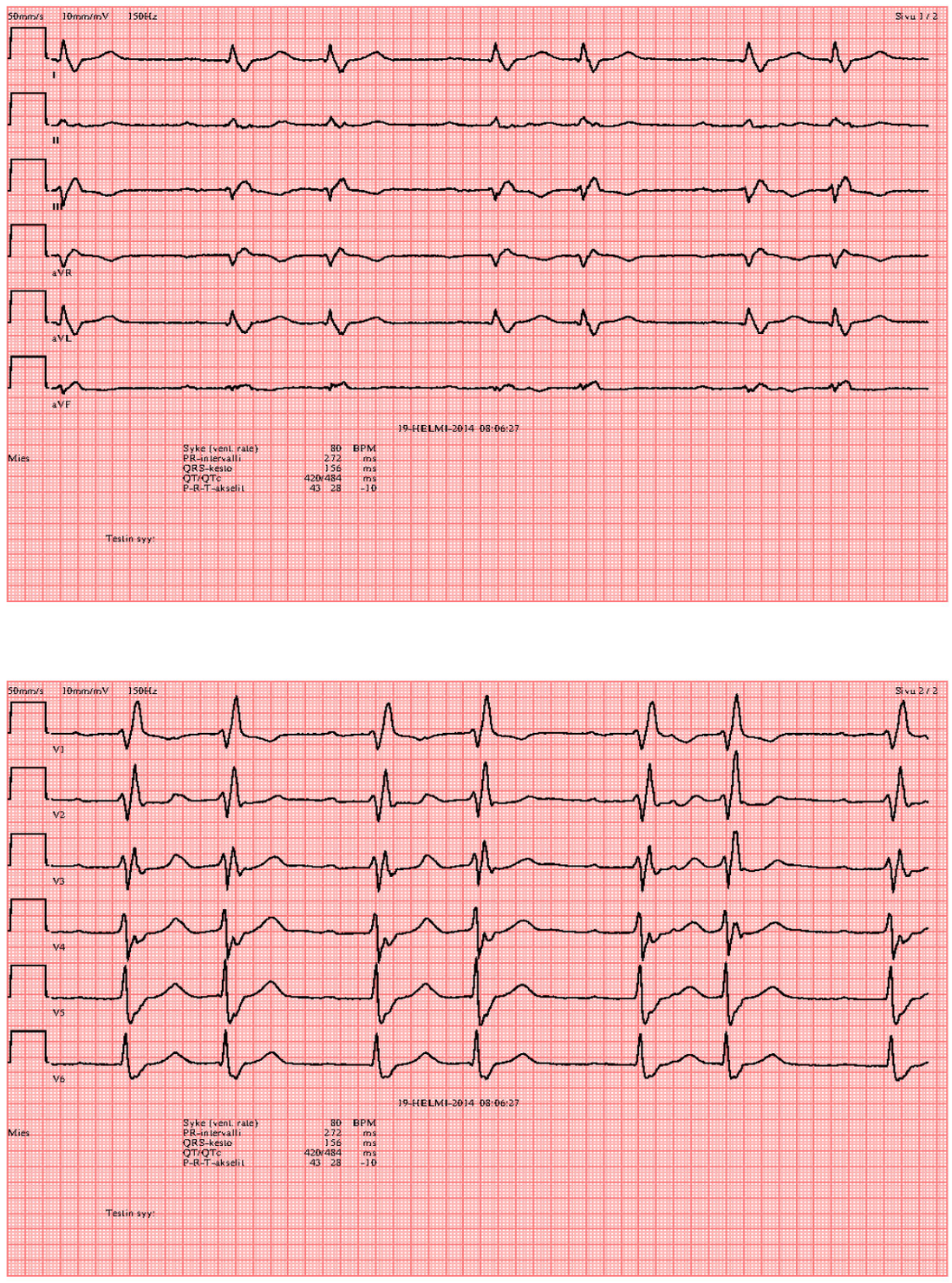
The quality of the registration is good, and a normal sinus rhythm is seen at a frequency of 60/min. Anything that can be interpreted as deviant does not appear in the registration.
Please note: The slight nodality in the limb connections in some QRS complexes goes into normal variation.

Sample S003

Result - Technical quality?	n
Good quality recording	18
Noise originating from the patient	4
Total	**22**

Result - Findings according to the person who performed the EKG?	n
Atrioventricular block	11
Junctional rhythm /ectopic atrial rhythm	2
Left bundle branch block	1
Nonspecific intraventricular conduction delay	1
Premature supraventricular complexes (PSVC)	13
Premature ventricular complexes (PVC)	1
Right bundle branch block	12
ST-segment changes	5
Ventricular pre-excitation (WPW, LGL)	1
Total	**47**

Result - Clinicians interpretation	n
Atrioventricular block	5
Premature supraventricular complexes (PSVC)	2
Right bundle branch block	2
ST-segment changes	1
Total	**10**



The technical quality of registration is good. The prevailing rhythm is sinus rhythm, but every second beat is clearly premature. The ventricular complex of the premature beat is similar to that of the basic rhythm and is preceded by an early atrial complex over a very long PQ interval. The atrial oscillation in question stands out in the T-wave of the previous complex (eg. in lead V1). In other words, it is premature atrial beats, referred to as supraventricular extrasystoles (SVES) that occur here as every second beat (bigeminy). The PQ interval of the sinus rhythm is also abnormally long, about 270 ms, as a sign of a delay in atrioventricular conduction, i.e. I° atrioventricular block is present. The ventricular complex is broadened in a way that indicates a right bundle branch block (RBBB), the typical morphology of which is seen in leads V1 and V6.

LABQUALITY

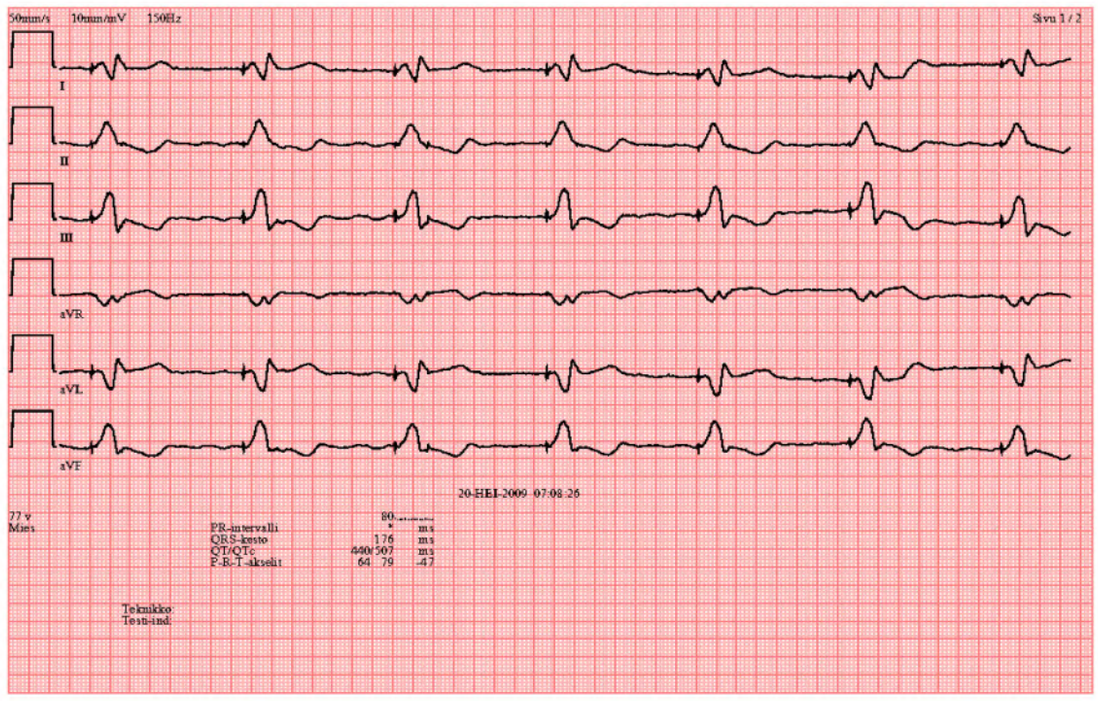
ECG, interpretation, October, 2-2022

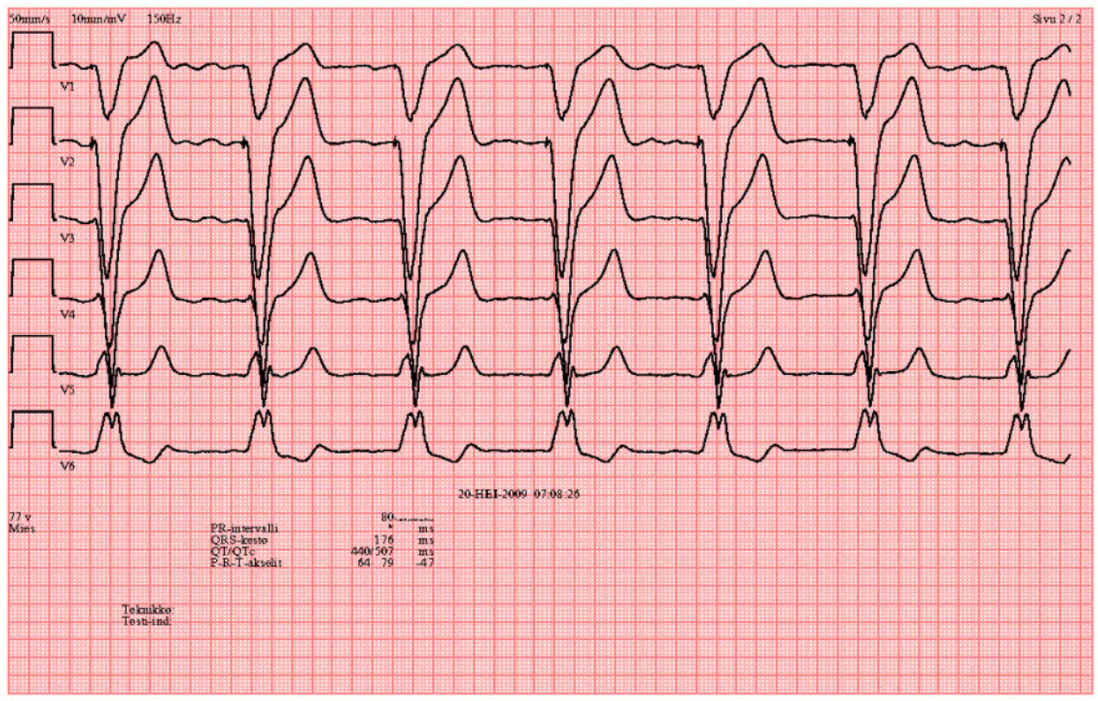
Sample S001

Result - Technical quality?	n
Baseline wander	1
Good quality recording	18
Noise originating from the patient	3
Total	**22**

Result - Findings according to the person who performed the EKG?	n
Atrial fibrillation or atrial flutter	6
Bradycardia / tachycardia	1
Electronic pacemaker	21
Left bundle branch block	15
Right bundle branch block	2
ST-segment changes	3
Ventricular rhythm	1
Total	**49**

Result - Clinicians interpretation	n
Atrial fibrillation or atrial flutter	1
Electronic pacemaker	6
Left bundle branch block	4
Right bundle branch block	1
ST-segment changes	2
Total	**14**





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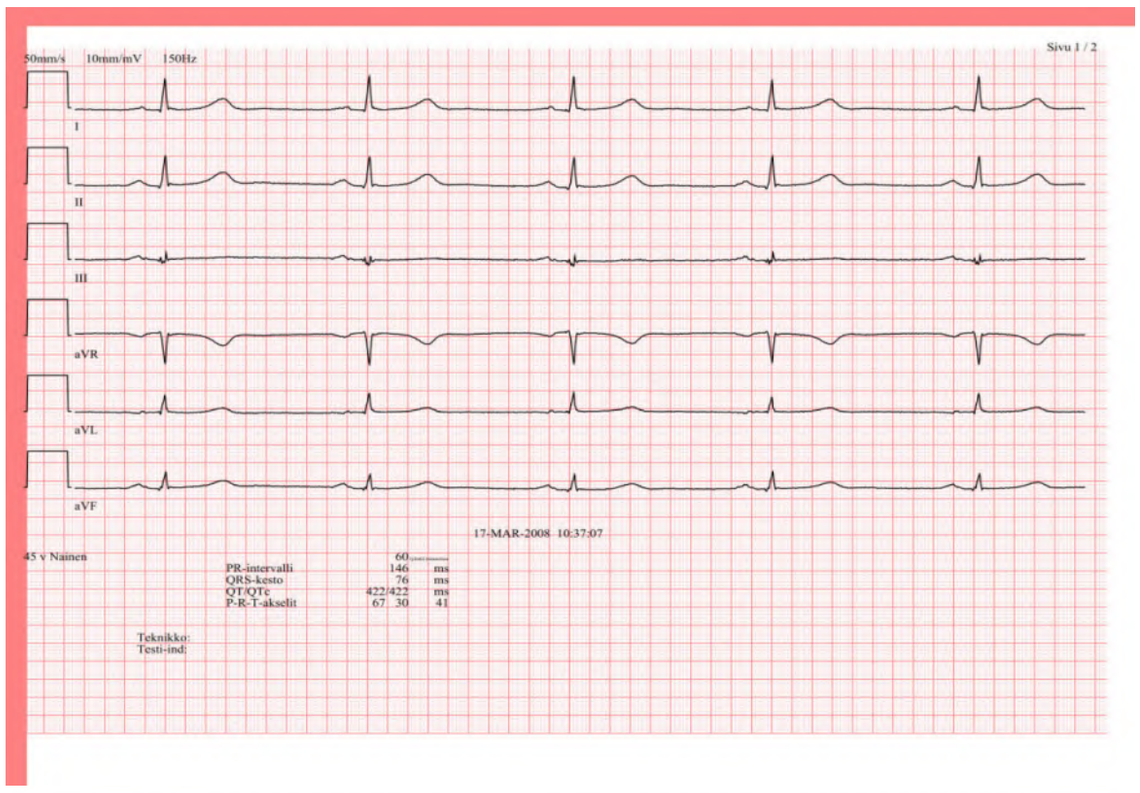
ECG, interpretation, October, 2-2022

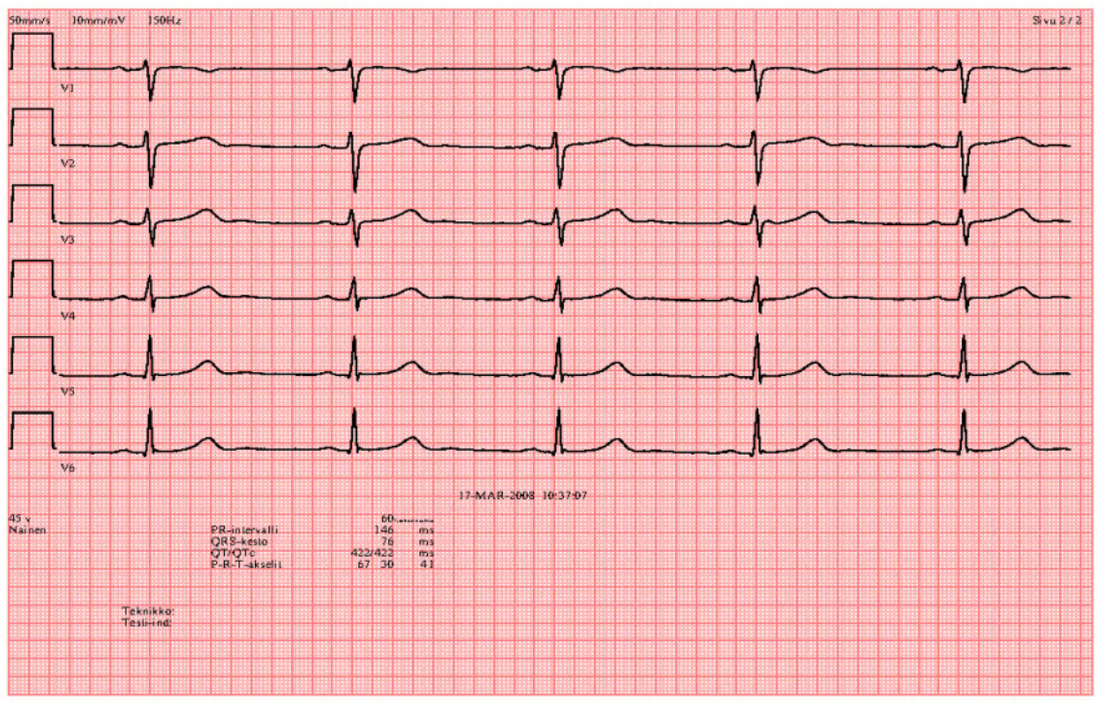
Sample S002

Result - Technical quality?	n
Good quality recording	20
Misplaced or wrongly attached leads	2
Total	**22**

Result - Findings according to the person who performed the EKG?	n
Bradycardia / tachycardia	1
Normal finding, regular sinus rhythm	22
ST-segment changes	1
Total	**24**

Result - Clinicians interpretation	n
Normal finding, regular sinus rhythm	6
Total	**6**





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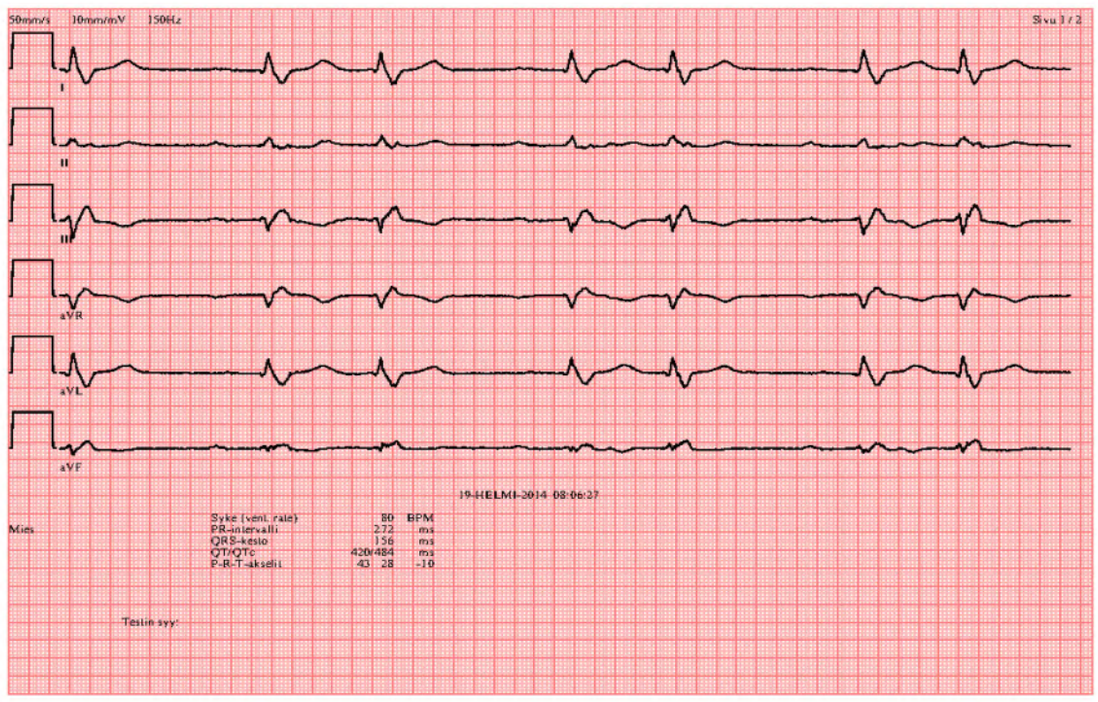
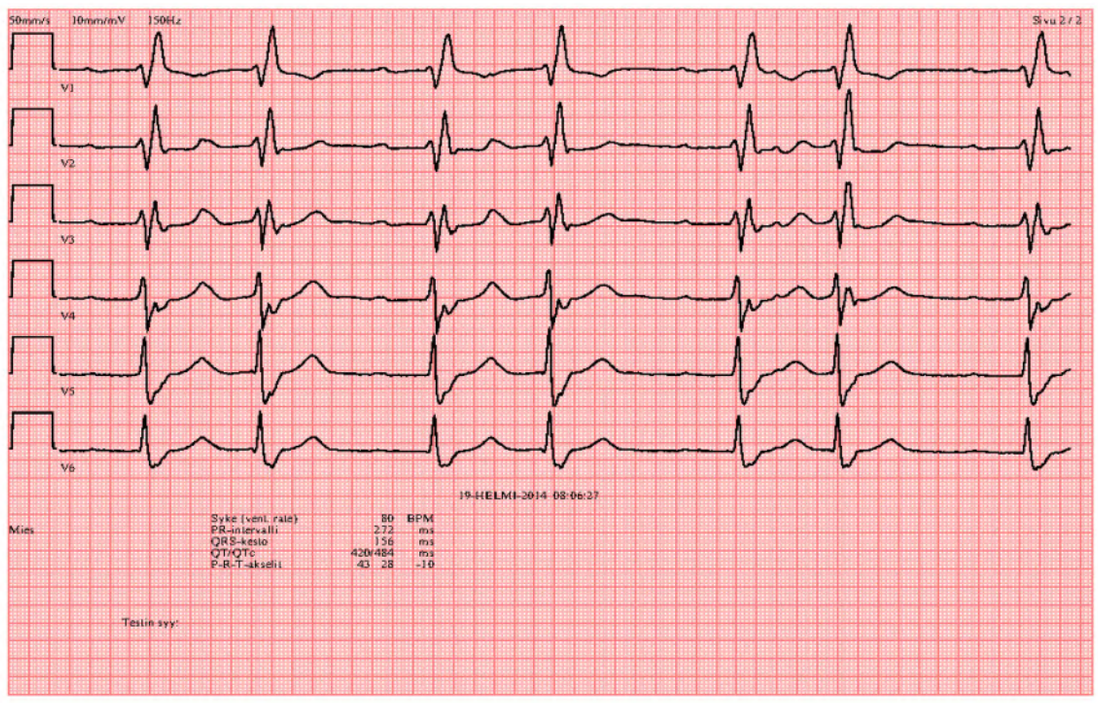
Sample S003

Result - Technical quality?	n
Good quality recording	18
Noise originating from the patient	4
Total	**22**

Result - Findings according to the person who performed the EKG?	n
Atrioventricular block	11
Junctional rhythm /ectopic atrial rhythm	2
Left bundle branch block	1
Nonspecific intraventricular conduction delay	1
Premature supraventricular complexes (PSVC)	13
Premature ventricular complexes (PVC)	1
Right bundle branch block	12
ST-segment changes	5
Ventricular pre-excitation (WPW, LGL)	1
Total	**47**

Result - Clinicians interpretation	n
Atrioventricular block	5
Premature supraventricular complexes (PSVC)	2
Right bundle branch block	2
ST-segment changes	1
Total	**10**





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External Quality Assessment Scheme

ECG interpretation
Round 2, 2022

Specimens
Samples S001-S003 (LQ703122021 – LQ703122023) were digital pictures of 3 patient cases with age and gender informed.

Report info
It is important to read the Final report first, because it contains important information of the findings and interpretations in each round.

Laboratory specific findings are published as a table. The accepted findings are marked with light green colour and own result with black radio button.

If you have not replied any findings the black radio button will not appear.

Comments
Expert comments are available in laboratory specific tables under the summary of results.

End of report

2022-10-25

FINAL REPORT

Product no. 7130

Subcontracting: Sample preparation

Samples sent	2022-10-03
Round closed	2022-10-24
Final report	2022-10-25

Request for correction
Typing errors in laboratory's result forms are on laboratory's responsibility. Labquality accepts responsibility only for result processing. Requests must be notified by writing within three weeks from the date of this letter.

Authorized by
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