**Instructions for measuring APTT test**

**Analyzer: Helena C1**

Operating manual

1. The analyzer is run by using ON/OFF button. The analyzer is ready to work if *PT: 00* announcement appears on the screen.
2. Select the desired test by pressing **Test** and using the appropriate arrow buttons until desired test appears on the screen. Press **Enter.**
3. If we need to count the time, we can use TIMER button.
4. The measuring is started after pressing **OPTIC** button.

Performing the test

1. Pipette 25 µl of patient sample and 25 µl APTT reagent into cuvette and ensure no air bubbles are present. If air bubbles are present, tap cuvette gently onto a hard surface until the air bubbles have dispersed. Begin the timer. (The timer on the right hand side of the display will begin to count upwards).
2. After 300 second incubation, move the cuvette to the optic channel. Press ‘Optic’ key. The optic channel will become active ready for the addition of Calcium Chloride.
3. Pipette 25 µl of pre-warmed Calcium Chloride directly into the cuvette. Pipette firmly and directly into the cuvette chamber, being careful not to hold the pipette tip lower than measuring level, or to pipette the reagent on the sidewall of the cuvette.
4. ‘---------‘ will appear on the screen while the measurement is being calculated.
5. Once a clot is detected, the APTT result will be displayed in seconds.
6. To clear test results, press ‘optic’ and end timer by re-pressing the timer button.

**Instructions for measuring PT, INR test**

**Analyzer: Helena C1**

Operating manual

1. The analyzer is run by using ON/OFF button. The analyzer is ready to work if *PT: 00* announcement appears on the screen.
2. Select the desired test by pressing **Test** and using the appropriate arrow buttons until desired test appears on the screen. Press **Enter.**
3. If we need to count the time, we can use TIMER button.
4. The measuring is started after pressing **OPTIC** button.

Performing the test

1. Pipette 25µl of patient sample into cuvette and ensure no air bubbles are present. If air bubbles are present, tap cuvette gently onto a hard surface until the air bubbles have dispersed. Begin the timer. (The timer on the right hand side of the display will begin to count upwards).
2. After 120 second incubation, move the cuvette to the optic channel. Press ‘Optic’ key. The optic channel will become active ready for the addition of PT reagent.
3. Pipette 50 µl of mixed, pre-warmed PT and Calcium 1:1 directly into the cuvette. (Ensure mixed thoroughly, immediately before use) Pipette firmly and directly into the cuvette chamber, being careful not to hold the pipette tip lower than the measuring level, or to pipette the reagent on the sidewall of the cuvette.
4. ‘--------‘ will appear on the screen while the measurement is being calculated.
5. Once a clot is detected, the PT result will be displayed in seconds, % and INR.
6. To clear test result, press ‘test’ and end timers by re-pressing the timer button.