



**SCHILLER**  
The Art of Diagnostics

## Press Information

# A new medical technology development: The world's first zoom function for the easy detection of atrial fibrillation

Baar, November 2009 SCHILLER proudly introduces a new and revolutionary medical tool called AF Toolbox, allowing the early and fast detection of atrial fibrillation based on regular resting ECGs. It is the result of a joint development project between EPFL (Swiss Federal Institute of Technology) Lausanne and Schiller medical technology engineers\*.

### Highly efficient and time-saving

Atrial fibrillation is the most common cardiac arrhythmia but in most patients difficult to detect. Thanks to this unique AF Toolbox (Atrial Fibrillation Toolbox), atrial fibrillations – which are the most common cause of strokes or cerebral infarcts - can be detected reliably without complicated tools or invasive procedures.

### Function of the AF Toolbox in 3 steps:

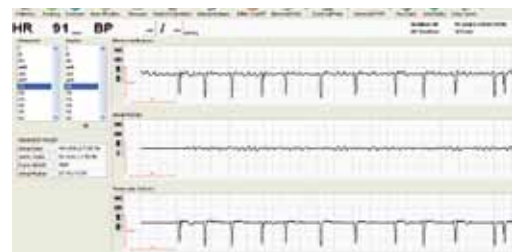
#### Step 1: Resting ECG recording

The data is obtained from a regular ECG recording (example: 12-lead resting ECG).



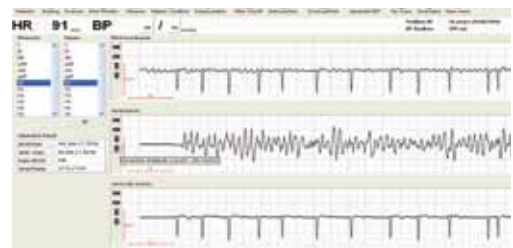
#### Step 2: Separation / QRST suppression

AF Toolbox separates the atrial activity from the ventricular activity by suppressing the ventricular activity in the ECG. The atrial activity can therefore be analysed isolated from the ventricular activity.



#### Step 3: Zoom, enlargement of the atrial activity

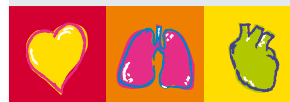
The enlarged presentation of the isolated atrial activity allows a reliable detection of atrial fibrillation (zoom view).





The AF Toolbox view displays the waveforms of the atrial and ventricular activities separately. This detailed information on the atrial activity allows the detection of various types of atrial fibrillations that are otherwise easily missed, based on a regular ECG recording and within minutes. Thanks to this information, reliable decisions can be made on whether or not a subsequent, invasive, electrophysiological examination is necessary.

\* Reference: Abächerli R., Leber R., Lemay M., Vesin JM., van Oosterom A., Schmid HJ., Kappenberger L. Development of a toolbox for electrocardiogram-based interpretation of atrial fibrillation. J Electrocardiol. Epub 2009 Aug 19.



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