IN-TIME Study
Influence of Home Monitoring on the Clinical Status of Heart Failure Patients

Study Design

- Randomized, controlled, international, multicenter study
- Assesses the impact of BIOTRONIK Home Monitoring® on the clinical status of heart failure patients
- 664 patients with chronic heart failure and an ICD or CRT-D in 36 centers
- Alert triggered telephone follow-up within 48 hours
- Patients followed for 12 months

Main Results

**Heart Failure Patient Status**

<table>
<thead>
<tr>
<th></th>
<th>Improved or Unchanged</th>
<th>Worsened</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional Follow-Up (n=331)</td>
<td>72.5%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Home Monitoring Group (n=333)</td>
<td>81.1%</td>
<td>18.9%</td>
</tr>
</tbody>
</table>

- **30%** Risk Reduction for Worsening of Clinical Status
- **>50%** Mortality Reduction in Heart Failure Patients after One Year*

**Reduction in All-Cause Mortality**

<table>
<thead>
<tr>
<th></th>
<th>Conventional Follow-Up (n=331)</th>
<th>Home Monitoring Group (n=333)</th>
</tr>
</thead>
<tbody>
<tr>
<td>306 regular termination</td>
<td>8.7</td>
<td>3.4</td>
</tr>
</tbody>
</table>

*only BIOTRONIK has CE approval to claim significant mortality reduction
Efficient Workflow Allows Timely Evaluation of Patients' Heart Failure Status

Patient call (structured interview)
Positive or clinically relevant?*

Data review
IN-TIME event? NO
Stop

Clinically relevant? NO
Stop

Stopped after:
4 Alerts**
2 Contacts**
0.3 Visits**

In-office visit

* Clinical discretion advised
** Per patient per year

IN-TIME Study Results Combined with Other Clinical Trial Results

Automatic Transmission
A system to rely on

• Industry-leading transmission reliability1, 2
• Plug-and-play set-up
• No patient interaction required

Early Detection
Early detection of relevant events

• Rhythmologic and technical parameters1, 3

Timely Intervention
Continuous therapy control

• Earlier clinical intervention for arrhythmias and suboptimal device therapy1, 3

Improved Patient Outcome
Proven clinical benefits for your patients

• Early detection of clinically relevant events1, 3
• Reduction in hospitalizations for atrial arrhythmia and stroke4
• Significant reduction in all-cause mortality

1 Varma N. et al., TheTRUST trial. Circulation 2010, 122:325-332
3 Varma N. et al., Europace Journal 2011, 13(3), Abstract P1026
4 Mabo P. et al., The COMPAS trial. European Heart Jounal 2011