

## Atrial fibrillation Facts and Figures

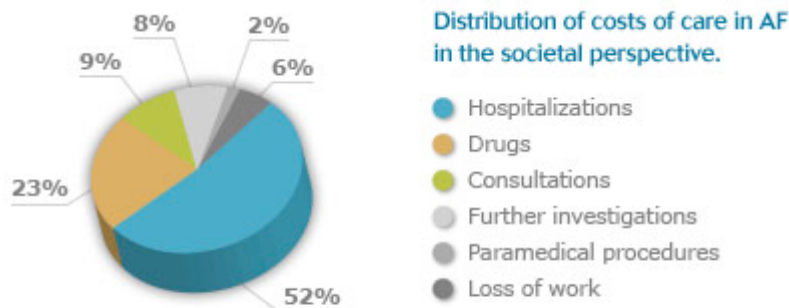
AF is a complex and common form of cardiac arrhythmia with a significant risk of morbidity and mortality. Current treatment options do not address this risk<sup>1</sup>

### **Disease Burden**

- Atrial fibrillation is a complex disease that double the risk of mortality<sup>2</sup>; increase the risk of stroke almost 5 fold<sup>3</sup>, worsens the prognosis of patients with CV risk factors<sup>4,5</sup>
- There are several underlying factors which put patients at increased risk of developing AF including age, obesity, hypertension, myocardial infarction (MI), congestive heart failure (CHF) and valvular heart diseases<sup>6</sup>
- AF may adversely affects quality of life<sup>7</sup>

### **Economic Burden**

- AF is the most common form of cardiac arrhythmia and currently affects nearly 7 million people in U.S. and Europe<sup>8</sup> and is expected to double by 2050<sup>9</sup>
- Two studies published in 2006 demonstrated that atrial fibrillation was the leading cause of hospitalisation for arrhythmia in the U.S. and represented one-third of hospitalisations for arrhythmia in Europe<sup>10,11</sup>
- Danish study demonstrated that, for the past 20 years, hospital admissions for AF have increased by 60 percent due to the ageing population, a rising prevalence of chronic heart disease and other factors<sup>12,13</sup>
- 70 percent of annual cost of AF management in Europe is driven by hospitalization care and interventional procedures<sup>14</sup>
- In 2003, the COCAF study showed that 52 percent of cost of care for AF patients in France is linked to hospitalisation



Jean-Yves Le Heuzey, Olivier Pazioud et Al. Cost of care distribution in atrial fibrillation patients: The COCAF study. Am Heart J 2004;147:121-6

### **Medical Burden**

- Drug therapy constitutes the main first line treatment choice in AF management. Antiarrhythmic drugs (AADs) are widely used for the conversion and long-term suppression of AF, despite the fact that current agents may have limited efficacy, poor tolerability and potential for serious ventricular proarrhythmia and/or organ toxicity.<sup>15</sup>
- None of the existing antiarrhythmic drug has ever shown any benefits in reducing morbidity or mortality in AF patients.

## References:

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- <sup>1</sup> Hohnloser/NEJM/Effect of Dronedarone on Cardiovascular Events in AF/P11/Col 1/Lines 1-21
- <sup>2</sup> Benjamin/Circulation/Impact of AF on the Risk of death / P946 / Abstract / Lines A13-A14
- <sup>3</sup> Lloyd-Jones/Circulation/Lifetime Risk for Development of AF/P1044/Col 2/Lines 24-25
- <sup>4</sup> ACC/AHA/ESC/Circulation/2006 Guidelines/P20/Paragraph 1/Lines 2-5
- <sup>5</sup> Wachtell/JACC/Angiotensin II Receptor Blockade Reduces New-Onset AF/P716/Col 2/Paragraph 2/Lines 9-12
- <sup>6</sup> Benjamin EJ et al, Prevention of atrial fibrillation: report from a national heart, lung, and blood institute workshop. *Circulation* 2009; 119(4): 606-618
- <sup>7</sup> Dorian P et al. *J Am Coll Cardiol.* 2000;36:1303-1309
- <sup>8</sup> ACC/AHA/ESC/Circulation/2006 Guidelines/P19/Paragraph 3/Lines 21-22
- <sup>9</sup> Miyasaka/Circulation/Secular Trends in Incidence of AF/P123/Figure 2
- <sup>10</sup> Singh SN et al. *J Am Coll Cardiol.* 2006;48:721-730
- <sup>11</sup> Fuster V et al. ACC/AHA/ESC Guidelines. *European Heart Journal* 2006;27:1979–2030
- <sup>12</sup> Revised ACC/AHA/ESC Guidelines on atrial fibrillation recommend new approach. Stroke risk should determine anti-clotting treatment for people with irregular heartbeat. Available at: [http://www.acc.org/qualityandscience/clinical/guidelines/atrial\\_fib/pdfs/ACC\\_AHA\\_ESC\\_AF\\_guidelines\\_release.pdf](http://www.acc.org/qualityandscience/clinical/guidelines/atrial_fib/pdfs/ACC_AHA_ESC_AF_guidelines_release.pdf). Last accessed: 05 November 2008
- <sup>13</sup> Friberg J, Buch P, Scharling H, et al. Rising rates of hospital admissions for atrial fibrillation. *Epidemiology* 2003;14:666–72
- <sup>14</sup> [Ringborg/Europace/Costs of AF/P1/Col 1/Lines 24-29
- <sup>15</sup> Doggrell SA, Hancox JC. Dronedarone: an amiodarone analogue. *Expert Opin Investig Drugs.* 2004; 13: 415-26.



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