

**Help Patients Live Better. Longer.**

**ACT**  
**against Afib**

# Patients With Restored NSR Live Better.

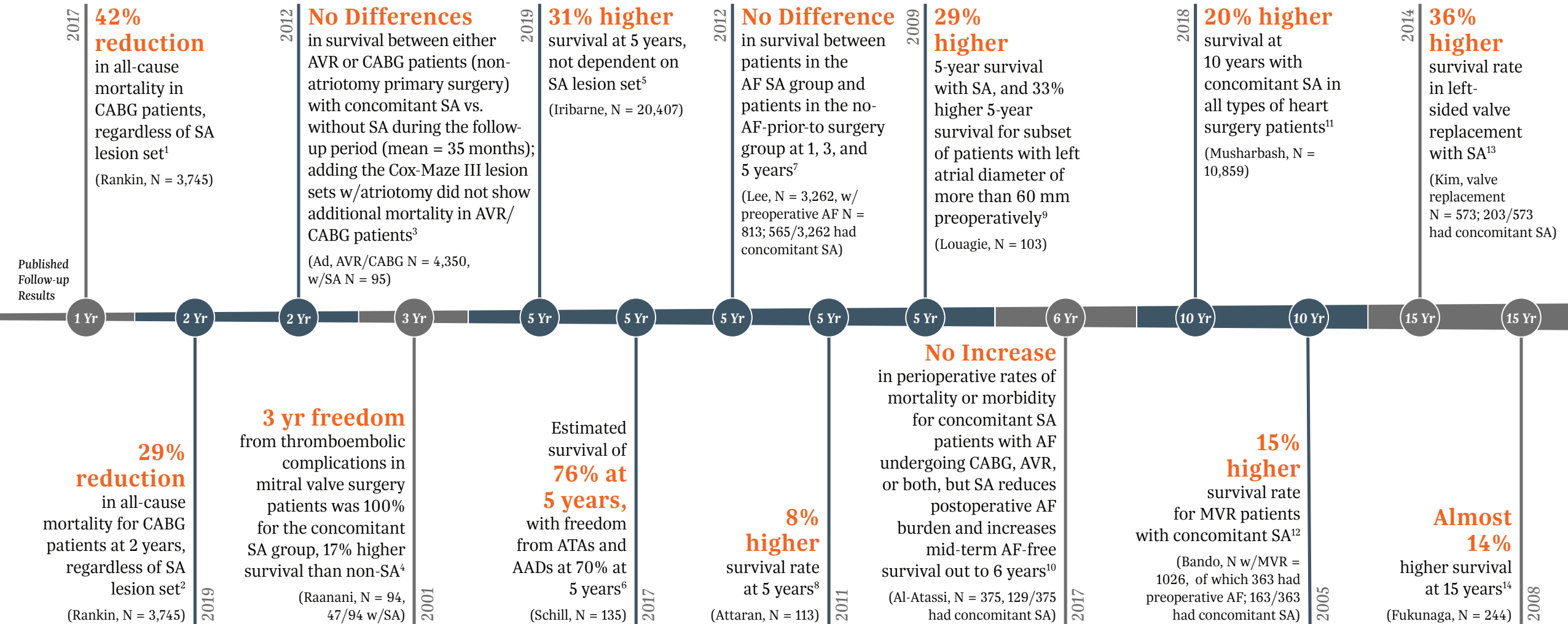
**In the majority of studies, patients achieving sinus rhythm demonstrate improved symptoms, as well as quality of life.**<sup>1</sup>

A wealth of data led the Surgical Thoracic and Heart Rhythm Societies to make a **Class I recommendation** that patients with AF undergoing valve or coronary surgeries receive surgical AF treatment.<sup>1,2</sup>

<sup>1</sup> JBadhwar, V. et al. (2017). The Society of Thoracic Surgeons 2017 clinical practice guidelines for the surgical treatment of atrial fibrillation. Ann of Thorac Surg, 103(1):329-41. NOTE: Level of evidence for concomitant mitral valve repair was A, and for aortic valve repair and/or coronary artery bypass was B.

<sup>2</sup> Calkins, H. et al. (2017). 2017 HRS/EHRA/ECAS/APHRS/SOIACE expert consensus statement on catheter and surgical ablation of atrial fibrillation. Heart Rhythm, 14(10):e275-e444. NOTE: HRS issued a Class I recommendation for AVR/CABG concomitant ablation for symptomatic persistent and long-standing persistent "refractory or intolerant to at least one Class 1 or 3 antiarrhythmic medication." Level of evidence for concomitant mitral valve repair; aortic valve repair; and/or coronary artery bypass was B.

# 14 articles, 48,000 patients show that SA patients live longer.



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# References

- <sup>1</sup> Rankin, J.S., Lerner, D.J., Braid-Forbes, M.J., Ferguson, M.A., & Badhwar, V. (2017). One-year mortality and costs associated with surgical ablation for atrial fibrillation concomitant to coronary artery bypass grafting. *Eur J Cardiothorac Surg*, 52(3):471-7.
- <sup>2</sup> Rankin, J.S., Lerner, D.J., Braid-Forbes, M.J., McCrea, M.L., & Badhwar, V. (2019). Surgical ablation of atrial fibrillation concomitant to coronary-artery bypass grafting provides cost-effective mortality reduction. *J Thorac Cardiovasc Surg*. In press.
- <sup>3</sup> Ad, N., Henry, L., Hunt, S., & Holmes, S.D. (2012). Do we increase the operative risk by adding the Cox Maze III procedure to aortic valve replacement and coronary artery bypass surgery? *J Thorac Cardiovasc Surg*, 19(4):438-42.
- <sup>4</sup> Raanani, E., Albage, A., David, T.E., Yau, T.M., & Armstrong, S. (2001). The efficacy of the Cox/maze procedure combined with mitral valve surgery: a matched control study. *Eur J Cardiothorac Surg*, 19(4):438-42.
- <sup>5</sup> Iribarne, A. et al. (2019). Surgical atrial fibrillation ablation improves long-term survival: a multicenter analysis. *Ann of Thorac Surg*, 107(1):135-42.
- <sup>6</sup> Schill, M.R. et al. (2017). Late results of the Cox-maze IV procedure in patients undergoing coronary artery bypass grafting. *J Thorac Cardiovasc Surg*, 153(5):1087-94.
- <sup>7</sup> Lee, R. et al. (2012). Midterm survival in patients treated for atrial fibrillation: a propensity-matched comparison to patients without a history of atrial fibrillation. *J Thorac Cardiovasc Surg*, 143(6):1341-51.
- <sup>8</sup> Attaran, S., Saleh, H.Z., Shaw, M., Ward, A., Pullan, M., & Fabri, B.M. (2011). Does the outcome improve after radiofrequency ablation for atrial fibrillation in patients undergoing cardiac surgery? A propensity-matched comparison. *Eur J Cardiothorac Surg*, 41(4):806-11.
- <sup>9</sup> Louagie, Y. et al. (2009). Improved patient survival with concomitant Cox Maze III procedure compared with heart surgery alone. *Ann of Thorac Surg*, 87(2):440-6.
- <sup>10</sup> Al-Atassi, T., Kimmaliardjuk, D.M., Dagenais, C., Bourke, M., Lam, B.K., & Rubens, F.D. (2017). Should we ablate atrial fibrillation during coronary artery bypass grafting and aortic valve replacement? *Ann of Thorac Surg*, 104(2), 515-22.
- <sup>11</sup> Musharbash, F.N. et al. (2018). Performance of the Cox-maze IV procedure is associated with improved long-term survival in patients with atrial fibrillation undergoing cardiac surgery. *J Thorac Cardiovasc Surg*, 155(1):159-70.
- <sup>12</sup> Bando, K. et al. (2005). Impact of preoperative and postoperative atrial fibrillation on outcome after mitral valvuloplasty for nonischemic mitral regurgitation. *J Thorac Cardiovasc Surg*, 129(5):1032-40.
- <sup>13</sup> Kim, H.J. et al. (2014). Valve replacement surgery for older individuals with preoperative atrial fibrillation: the effect of prosthetic valve choice and surgical ablation. *J Thorac Cardiovasc Surg*, 147(6):1907-17.
- <sup>14</sup> Fukunaga, S. et al. (2008) Effect of surgery for atrial fibrillation associated with mitral valve disease. *Ann of Thorac Surg*, 86(4):1212-7.