From Cells to Society; Looking at the experiences of Wāhine with Atrial Fibrillation

**Background:** Atrial fibrillation (AF) is one of the most common cardiovascular diseases in Aotearoa (New Zealand). Despite extensive research on AF, wāhine (women) continue to be underrepresented in these studies. This, in turn, results in treatment strategies primarily based on data from tāne (men) with AF yet applied uniformly to women without consideration of sex- specific differences.

**Methods:** The experiences of wāhine with AF were compared to tāne with AF at three distinct levels. Firstly, a demographic analysis on factors such as BMI, medication use and comorbidities. Secondly, an assessment of ganglionated plexi (GP) neurons in epicardial fat tissue via 3D confocal imaging. And finally, hearing patient-reported experiences through patient surveys at Waikato Hospital.

**Results:** The first part reviewed demographic data of 266 patients, of which 86 (32.3%) presented with AF. Of the 86 with AF, 21 (24.4%) were females. In the AF cohort, there were differences between wāhine and tāne for age, as well as the prevalence of hypertension and the prescription rate of ace inhibitors, calcium channel blockers, diuretics, and lipid lowering drugs. Tissue imaging and lab surveys are currently underway with preliminary results anticipated by April, 2025.

**Conclusion:** Our findings aim to shed light on the experiences of wāhine with AF in Aotearoa, informing tailored care. As the project continues, more data can strengthen confidence in these results and possibly reveal new findings. Nevertheless, these findings would benefit from further exploration of this important but under-researched area.