# Research Findings for the Community

# WOMEN WITH ATRIAL FIBRILLATION EXPERIENCE MORE SEVERE SYMPTOMS THAN MEN AFTER ACCOUNTING FOR THERAPY RECEIVED

#### What was the purpose of this research study?

Women experience disproportionately poorer atrial fibrillation outcomes, including higher symptom severity and lower quality of life. Therapies that target atrial fibrillation symptoms may be underutilized in women. For example, women with atrial fibrillation are less likely to receive rhythm control treatments including cardioversions and ablations that reduce symptom severity.

The purpose of this research study was to see if women experience higher symptoms of atrial fibrillation even if they receive the same therapies as men.

### What questions were asked?

After holding therapies received equal, do women with atrial fibrillation still experience high symptom severity than men?

#### What was the study design?

The cohort study following the outcomes of 953 people with atrial fibrillation over the age of 18. The people in the study were recruited across 4 different academic medical centers to: 1) Fill out surveys every 6 months on their patient-reported outcomes, including symptom severity, and 2) Allow this survey data to be linked to their electronic medical record data.

We used a technique called "propensity score matching" which created 1 group of people who had not received the therapies, and another group of people who had received the therapy, and matched them on key characteristics so they were otherwise as similar. We looked at differences in symptom severity between women and men in these matched groups.

#### What was discovered?

We discovered that even after accounting for therapies, women have higher symptom severity than men. These findings must be interpreted with caution because we used electronic medical record data to establish treatment history, and there is a chance that patients had received therapies at outside institutions and there was no documentation of this.

## What does this mean for my health?

If you have atrial fibrillation, your personal characteristics (sex) may impact how you experience symptoms.

#### Research article (literature citation)

**Gleason, K.T.\***, Dennison Himmelfarb, C.R., Ford, D.E., Lehmann, H., Samuel, L., Jain, S.K., Naccarelli, G.V., Aggarwal, V., & Nazarian, S. (2019). "Association of Sex, Atrial Fibrillation Therapies, and Patient-Reported Outcomes." *BMJ Heart*. (https://heart.bmj.com/content/heartjnl/early/2019/05/22/heartjnl-2019-314881.full.pdf?ijkey=Yb8jEGt6F91M3uL&keytype=ref).