

Patient Preferences in Decision-Making for Stroke Prophylaxis in Atrial Fibrillation

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Introduction

- Despite increased risk of stroke, many patients with atrial fibrillation (AF) do not receive stroke prophylaxis
- Health values are not always the same between prescribers and patients (stroke averse versus bleed averse)
- While oral antithrombotic options for stroke prophylaxis have doubled in recent years, it is still unclear which option patients prefer most for stroke prophylaxis in AF
- In order to optimize use of effective antithrombotic therapy, it is important to educate patients on the benefits and risks of medications
- There are currently no published studies evaluating patient preferences of antithrombotic therapy for stroke prophylaxis since the TSOACs (dabigatran, rivaroxaban, apixaban) became available

Study Objectives

Primary Objectives:

- To gain an understanding of the factors that influence patient preferences for stroke prophylaxis in AF
- To determine the most preferred and least preferred therapeutic options for stroke prophylaxis in AF from a patient perspective

Secondary Objective:

- To compare treatment preferences for stroke prophylaxis before and after unblinding of drug names

Methods

Design

- Self-administered web-based survey
- Participants provided with background information on AF, stroke, and possible medication complications including major bleeding
- Elicited patient preferences by 1) ranking eleven factor statements in order of importance and 2) completing a likert scale for each statement ranging from "Not Important" to "Very Important"
- Determined which treatment option was most and least preferred when medication names were blinded and then unblinded based on a vignette profile of the drug's efficacy, toxicity, cost, and convenience characteristics

Study population

- Patients without AF identified in the Island Health permission to contact database with risk factors for AF (surrogates)

Study Criteria

Inclusion	Exclusion
<ul style="list-style-type: none">- 18 years of age and older- CHADS₂ score \geq 1	<ul style="list-style-type: none">- Unable to read or write English- Significant cognitive impairment- History of using an oral anticoagulant for any indication

CHADS₂ Score: 1 point for each congestive heart failure, hypertension, age \geq 75, diabetes; 2 points for previous stroke or transient ischemic attack (TIA)
TSOAC: Target specific oral anticoagulant
OAC: Oral anticoagulant
ASA: Acetylsalicylic acid
GI: Gastrointestinal
IQR: Interquartile range

Recruitment and Demographics

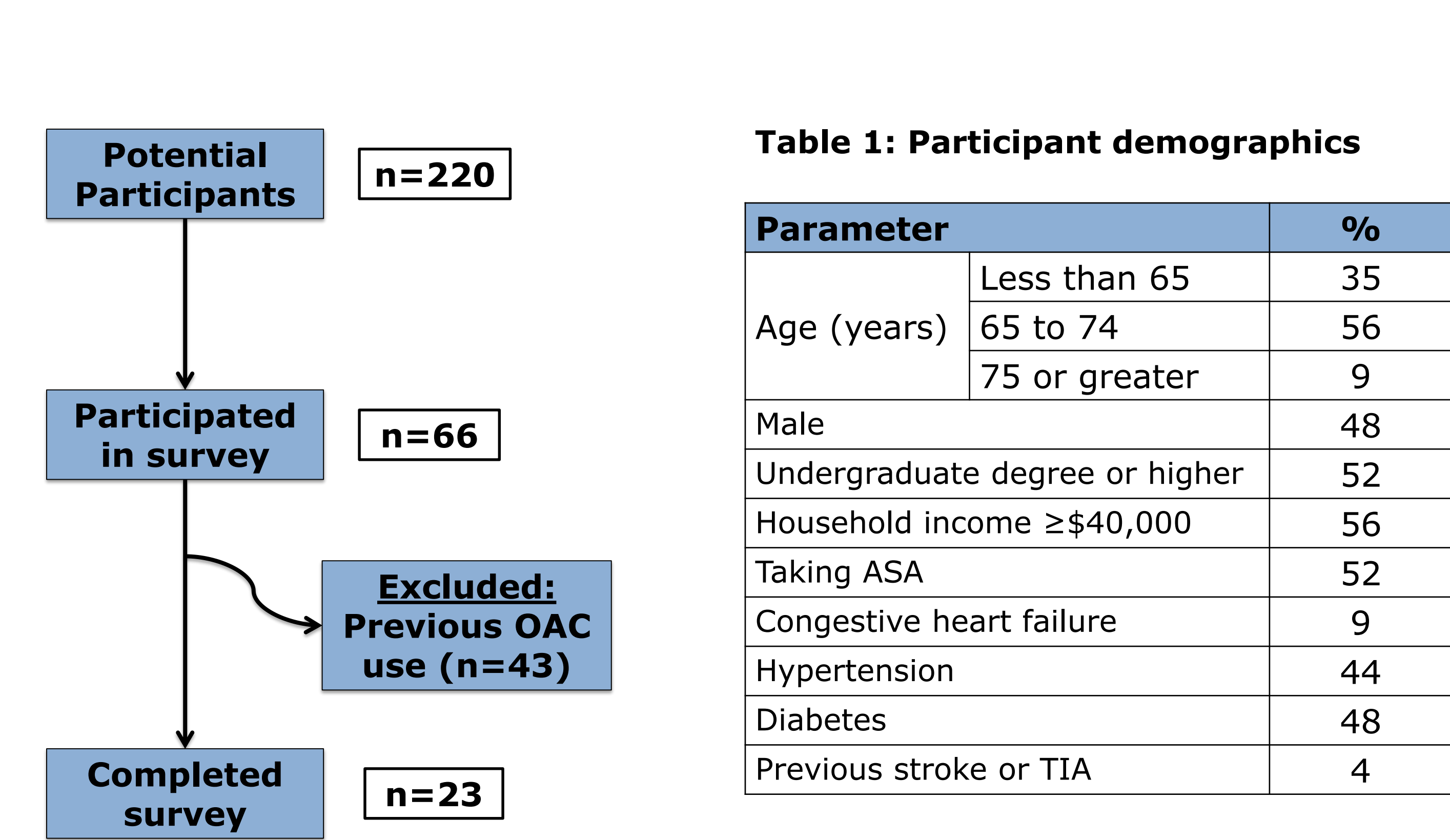


Figure 1: Recruitment flow chart

Results

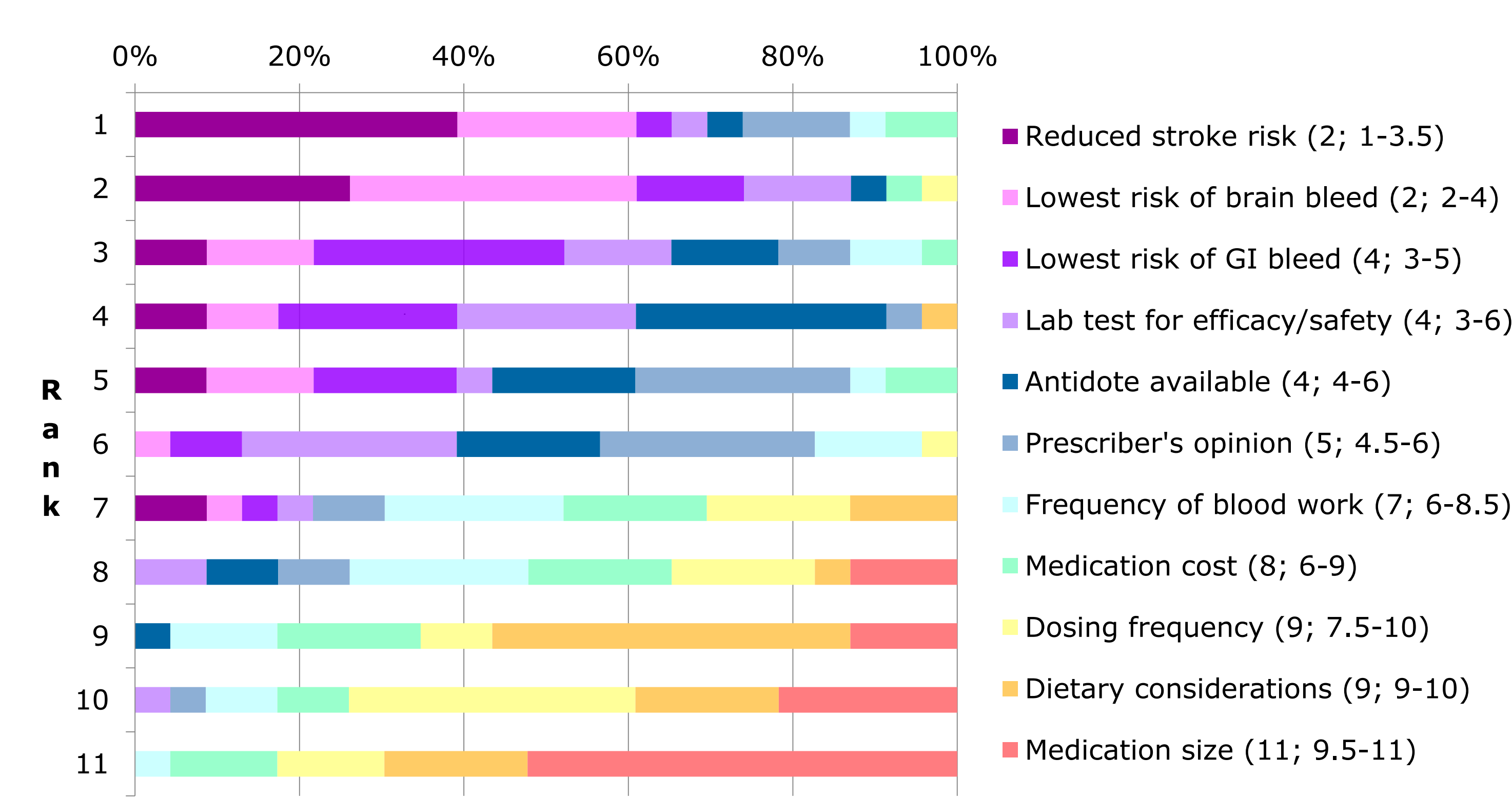


Figure 2: Rank order of medication factor preferences (median rank; IQR)

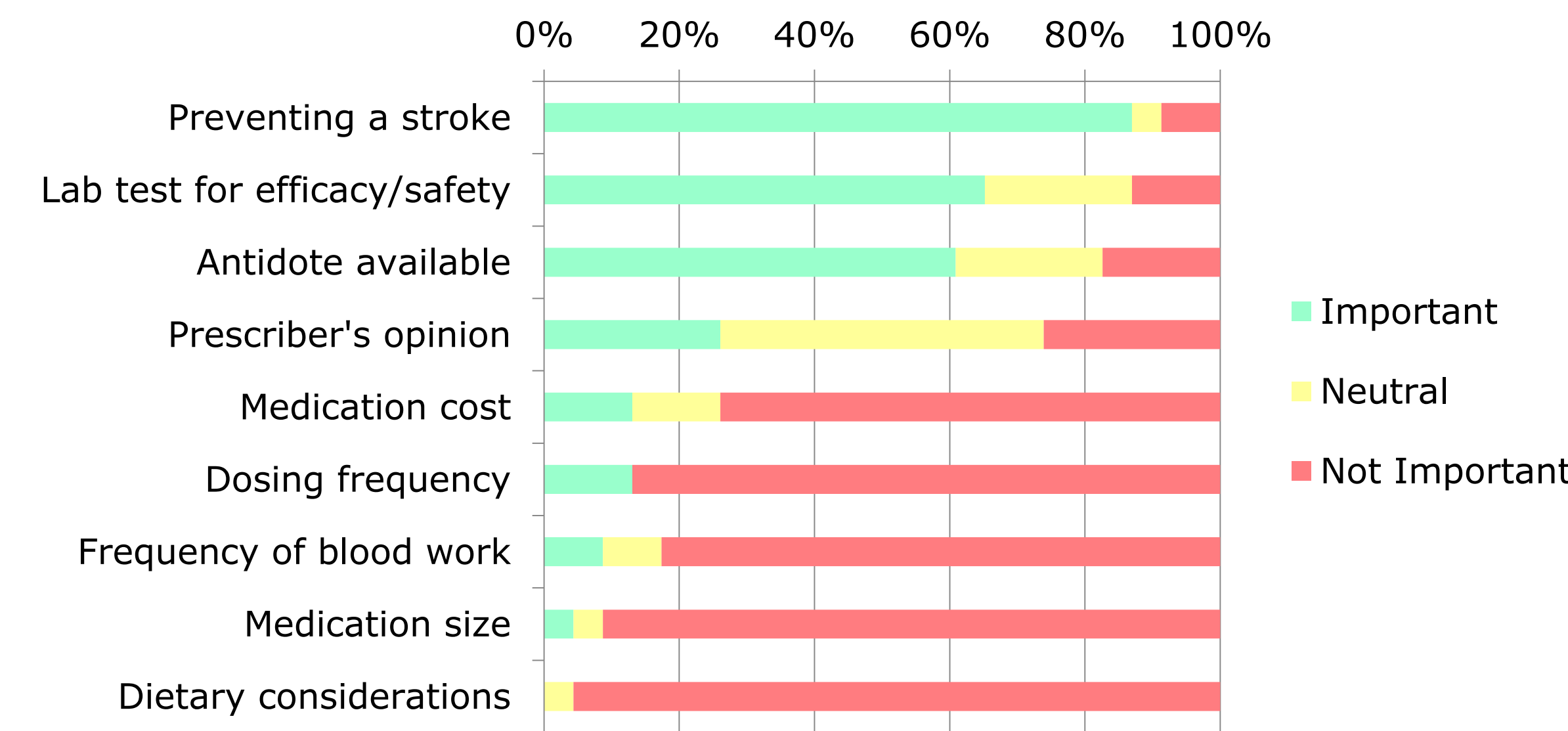
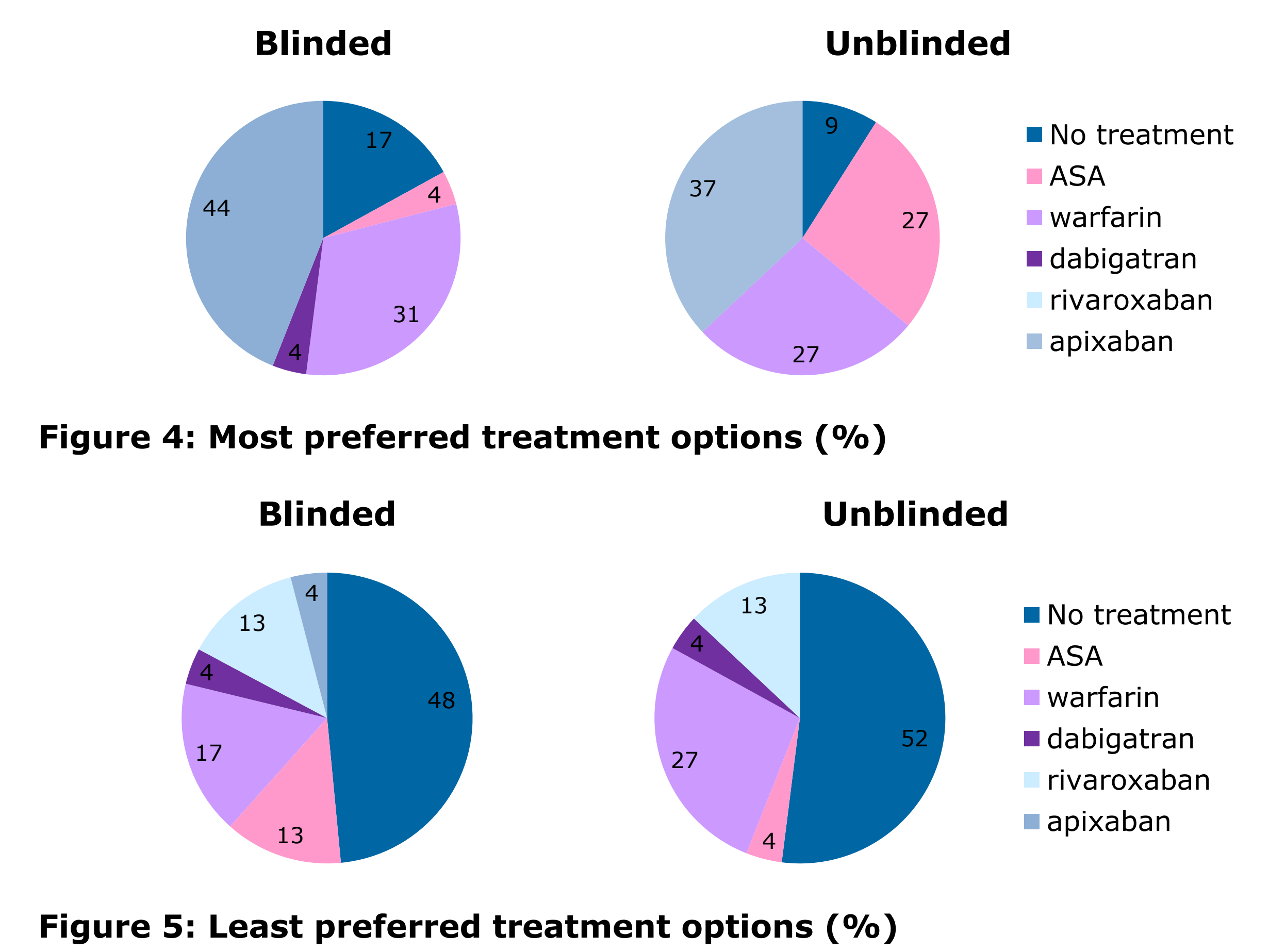


Figure 3: Importance of medication factor preferences

Results



Key Findings

Medication Factor Preferences

- Reduced stroke risk and lowest risk of brain bleed had the highest median ranking
- Medication size had the lowest median ranking
- High inter-participant variability existed between factors

Treatment Preferences

- Apixaban was the most preferred treatment option
- No treatment was the least preferred treatment option
- Unblinding treatment options did not appear to affect participants' treatment choices

Discussion

- Consistent with findings from a recent systematic review, participant preferences regarding medication factors and treatment choices were highly variable
- Despite many patients with AF not receiving stroke prophylaxis, few participants preferred that option, and the majority considered it the worst option

Limitations

- Small sample size
- Participants did not have AF
- No formal statistical analysis performed

Conclusion

- Surrogate participants educated about AF placed a high importance on reducing stroke risk and limiting bleed risk
- High inter-participant variability suggests the importance of including the patient in the decision-making process when selecting a treatment option
- Further studies are needed to assess if the findings are replicable in patients making actual clinical decisions