Presenter Disclosure Information

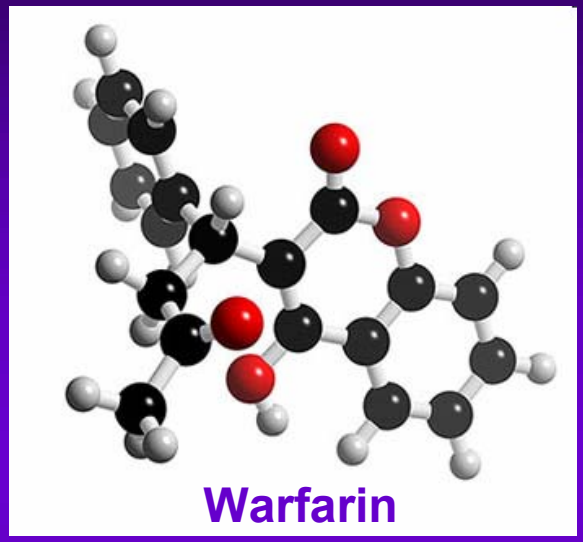
- *Alan S. Go, MD*
- *Discussant, THINRS VA Cooperative Study #481*

FINANCIAL DISCLOSURE:
Grants/Research Support: National Heart, Lung and Blood Institute; National Institute on Aging; Johnson & Johnson

UNLABELED/UNAPPROVED USES DISCLOSURE:
None

THINRS:

To Thine Own Self Be True?



Alan S. Go, M.D.

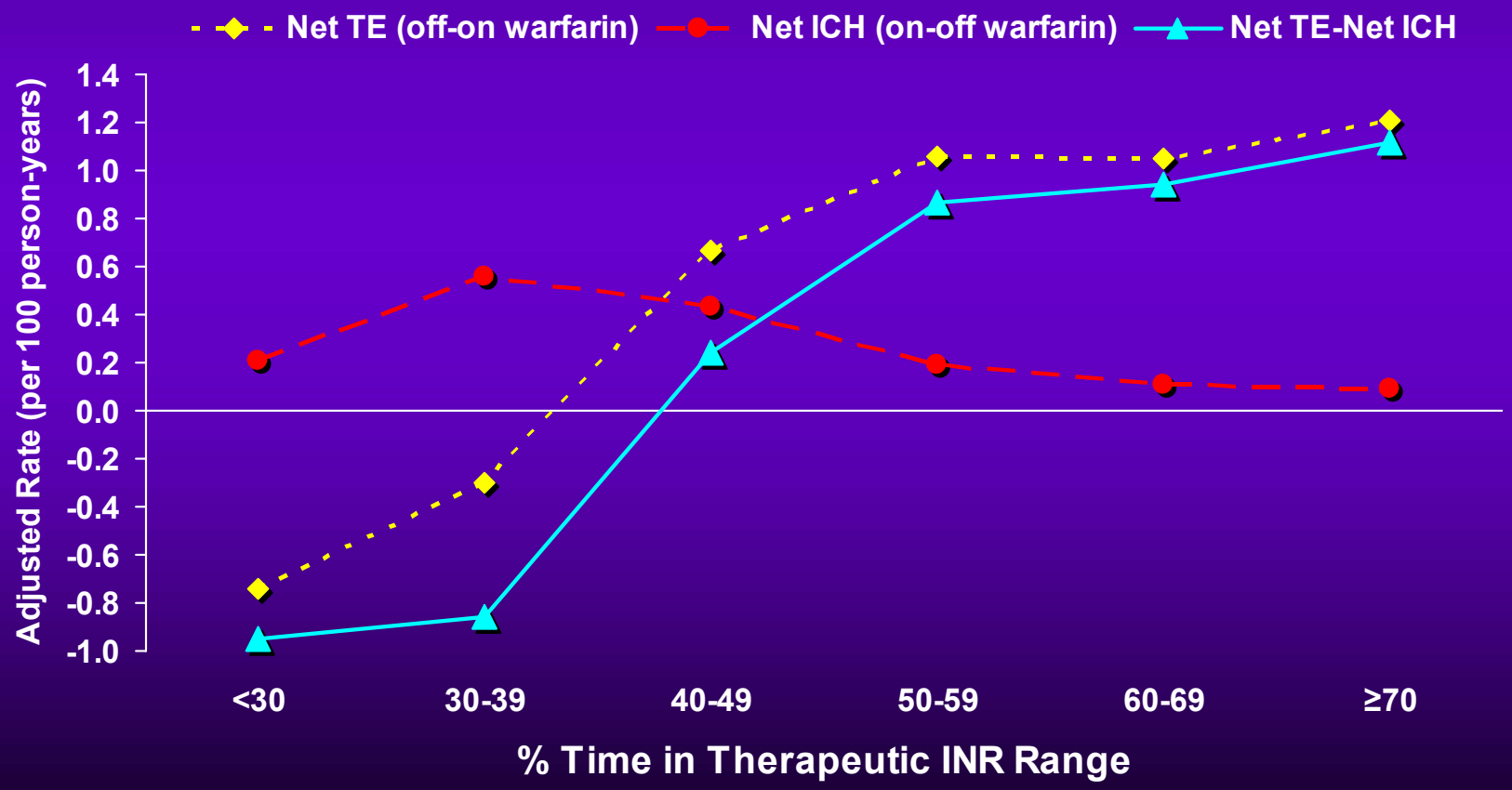
AHA Late-Breaking Clinical Trials IV

November 12, 2008

Maximizing Warfarin's Benefit: Quality Matters

Net Clinical Benefit of Warfarin by Individual % Time in Therapeutic INR Range for Atrial Fibrillation: The ATRIA Study (N=13,521)

"Net Benefit" = Thromboembolic Events Prevented Minus Intracranial Bleeds Caused



AHA Scientific Sessions 2007

Meta-Analysis of Self-Testing/Management vs. Control Strategies for Warfarin

- 14 RCTs of relatively small sample sizes
- Summary for self-testing/management vs. "control" (e.g., MD care, specialized clinic)
  - **OR 0.45 (95% CI: 0.30 – 0.68)** for TE events
  - **OR 0.65 (95% CI: 0.42 – 0.99)** for major bleeds
- Several notable limitations

Heneghan C. *Lancet* 2006; 367: 404–11

THINRS: What Did It Accomplish?

- Enrolled large sample of anticoagulated patients with MHV or atrial fibrillation
- High proportion of screened patients able to be trained on PST/telephone protocol
- Compared structured anticoagulation management service vs. PST with stratified randomization and relatively low drop-out
- High quality delivery of warfarin therapy (Cumulative %TTR = 62-66% in both arms)
- Blinded adjudication of events

THINRS: Key Questions

- Was this an underpowered study?
  - Very low rates of ischemic stroke observed in both arms secondary to effective anticoagulation and, in part, inclusion of some low stroke risk patients. However, no difference in numbers of stroke or ICH events between groups.
- Is the study population generalizable to patients with AF or MHV just starting warfarin in the general population?
  - Veterans, 98% men, 92% white, younger (mean ~67 yrs), already demonstrated ability to use device correctly
- Was the right comparison group used?
  - “High quality AC management services” is one treatment approach but may not be considered the standard in every clinical setting
- Given open-label design, was there co-intervention or patient behavioral change after being randomized?
- What are the resource utilization and cost differences?

Clinical Implications

- THINRS reinforces that delivering high quality anticoagulation, regardless of method, leads to low rates of ischemic stroke & intracranial bleeding
- Home INR monitoring in eligible patients:
  - *Only modestly improved %TTR compared with anticoagulation management service*
  - *No significant difference in stroke and major bleeding*
  - *No long term difference in quality of life*
- Given recent Medicare decision to expand coverage and THINRS results, home INR monitoring (with coordinated follow-up) is a reasonable alternative for appropriate patients with mechanical valves, AF and VTE