

GCIIG Harmonization Committee Stats Section

Leiden, December 2012

General Assembly Report

Chair: Jim Paul, SGCTG

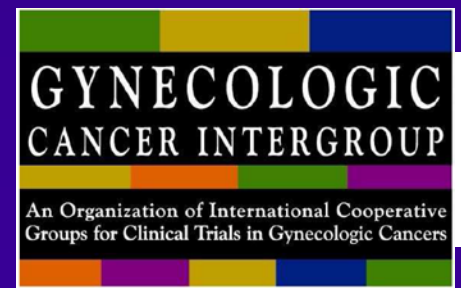
Co-Chair: Byung Ho Nam, KGOG



- Discussion on phase II trials for targeted agents with associated biomarker
- Review of consensus statement on designs for studies in rare cancers
- Discussion topics for futures meetings:-
 - The merits of PFS or OS as primary end-point
 - Futility boundaries
 - Response adaptive designs
 - Allowing/adjusting for treatment cross-over after progression in assessing effect of a new treatment on OS ✓

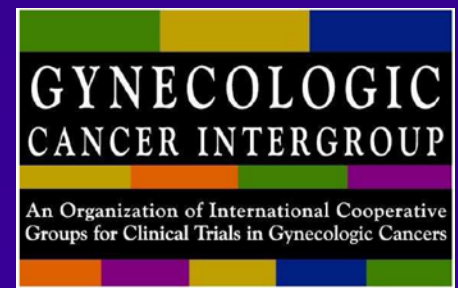
Phase II Trials for Targeted Agents -General Background Situation-

- We have a new targeted agent with associated biomarker to identify the “target” patient group (biomarker +ve)
- The preliminary choice of biomarker will be based on
 - Biological rationale
 - Laboratory data (in vitro/in vivo)
 - PD from phase I
- Nevertheless still uncertainty that biomarker is correct
 - Measuring the wrong thing
 - Have the wrong cut-off
 - Not required



Phase II Trials for Targeted Agents -General Background Situation-

- The phase II element of testing therefore should both
 - Provide a preliminary assessment of the worth of the drug
 - Provide a preliminary assessment of the worth of the biomarker
 - Allow exploratory analysis
 - To refine the definition of biomarker +ve
 - To identify other biomarkers
- To do this most reliably need to do phase II in biomarker +ve and biomarker –ve patients (overselecting in the rare group to keep numbers reasonable)



Phase II Trials for Targeted Agents -General Background Situation-

We wish to conduct a phase II to establish whether we should:-

- Go to a phase III in the “target” patient group (biomarker +ve) only
- Go to a phase III in all patients
 - Further assessment the biomarker (some evidence of effect in the biomarker –ve patients, but not as marked as in the biomarker +ve group)
 - Without the biomarker (no evidence that the effect of the new agent depends on the biomarker)
- Not go to phase III – no evidence of effect in biomarker +ve or –ve patients (back to drawing board look for another biomarker)



Design 4: Randomized Phase II Trial Designs With Biomarkers

Boris Freidlin, Lisa M. McShane, Mei-Yin C. Polley, and Edward L. Korn
 J Clin Oncol 30:3304-3309. © 2012 by American Society of Clinical Oncology

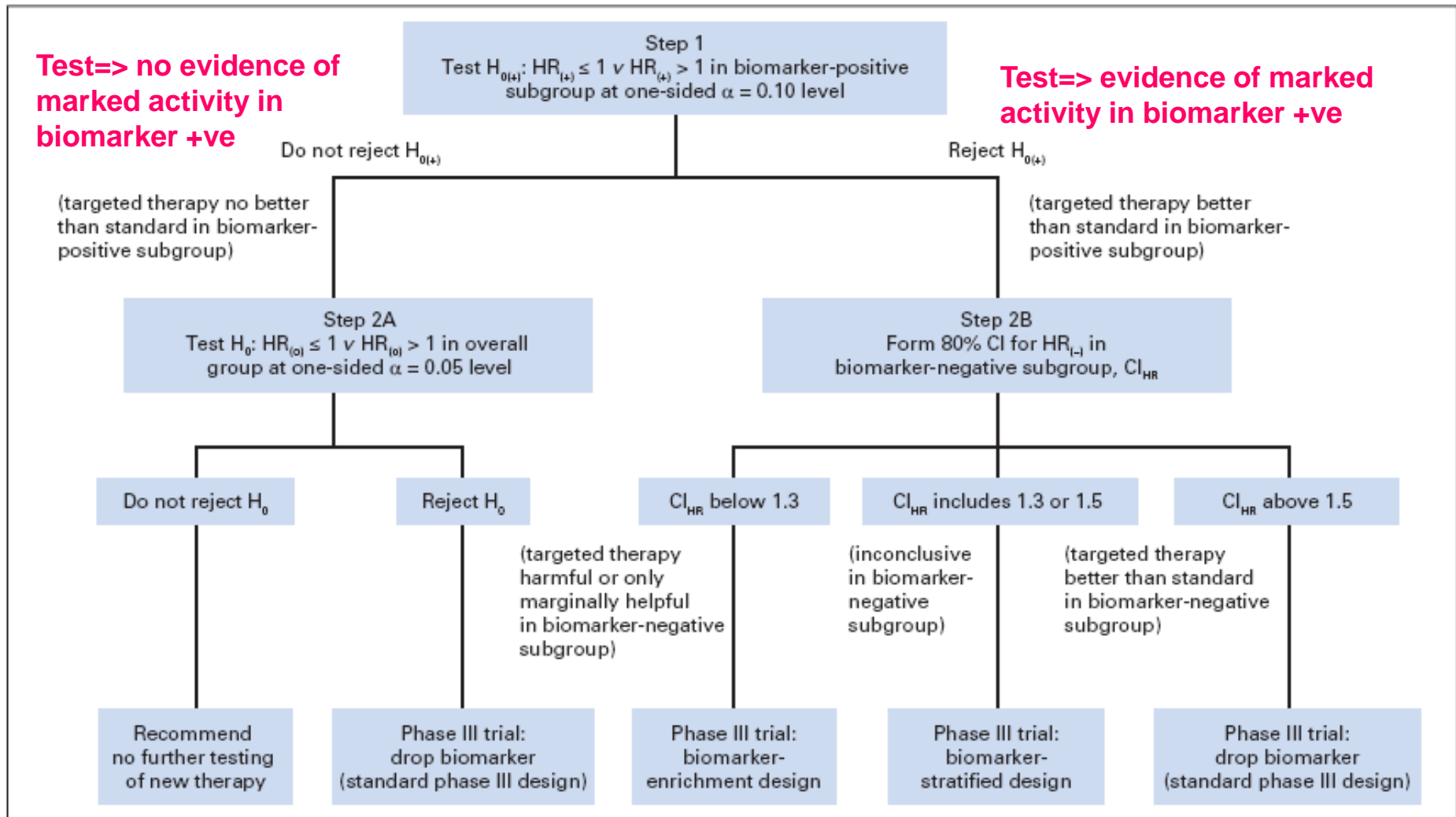


Fig 1. Decision algorithm for recommendation of phase III trial design based on the outcome of the proposed phase II biomarker trial design. H_0 , null hypothesis in the overall group; $H_{0(+)}$, null hypothesis in the biomarker-positive subgroup; HR, hazard ratio; $HR_{(+)}$, HR of standard therapy relative to targeted therapy in biomarker-positive subgroup; $HR_{(-)}$, HR of standard therapy relative to targeted therapy in biomarker-negative subgroup; $HR_{(0)}$, HR of standard therapy relative to targeted therapy in overall group.