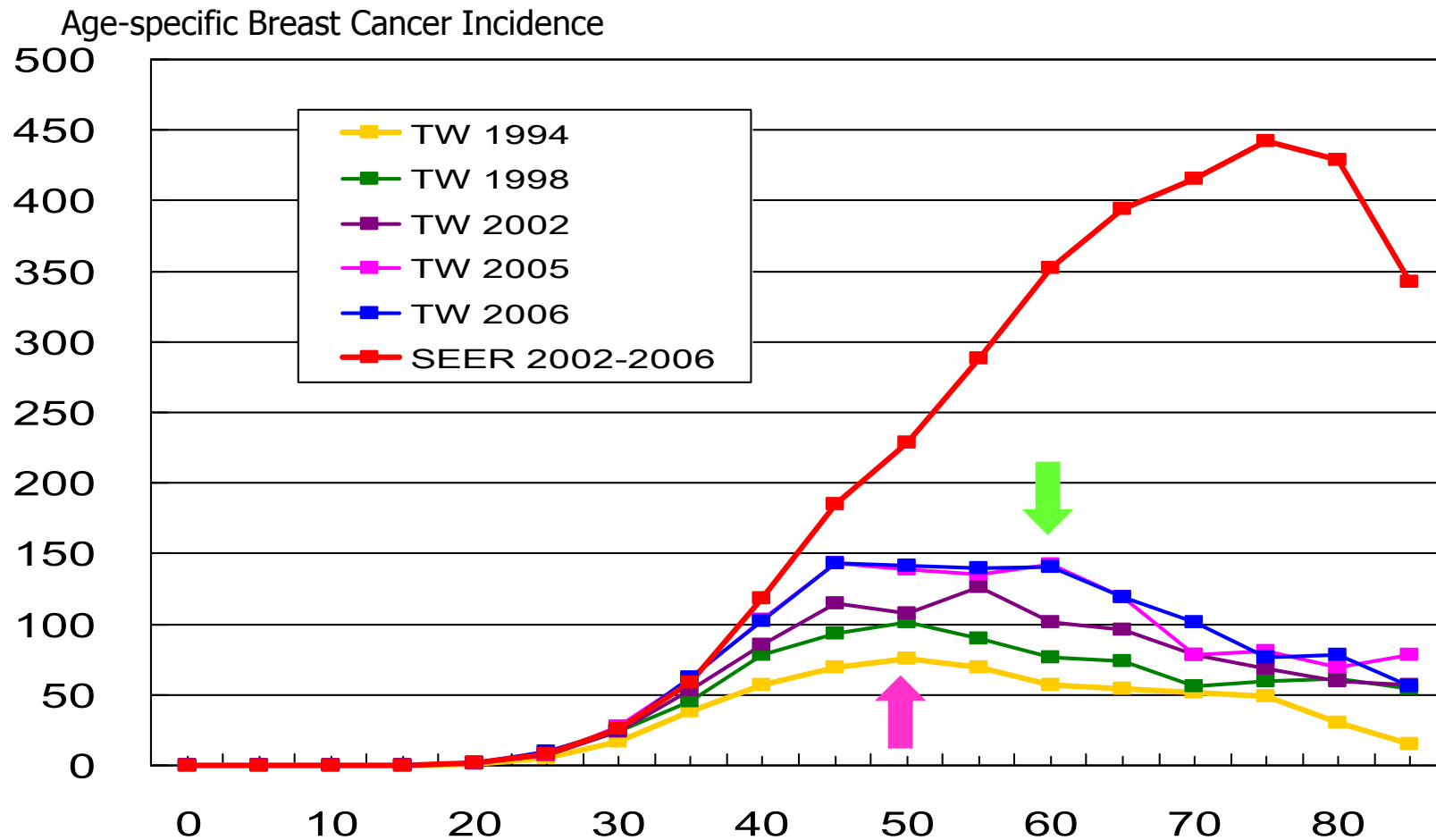


Breast Cancer Clinical Trials in Taiwan

Chiun-Sheng Huang, MD, PhD, MPH
Breast Center and Department of Surgery
National Taiwan University Hospital

Many breast cancers are seen in premenopausal women in Taiwan



Efficacy of Mammography Screening

Swedish Two-county Trial (Tabar, Cancer, 1995)

Age Group	Mortality Reduction
40-49	13%
1-year interval	19%
2-year interval	10%
50-74	34%

Sensitivity of Screening Modalities According to Age

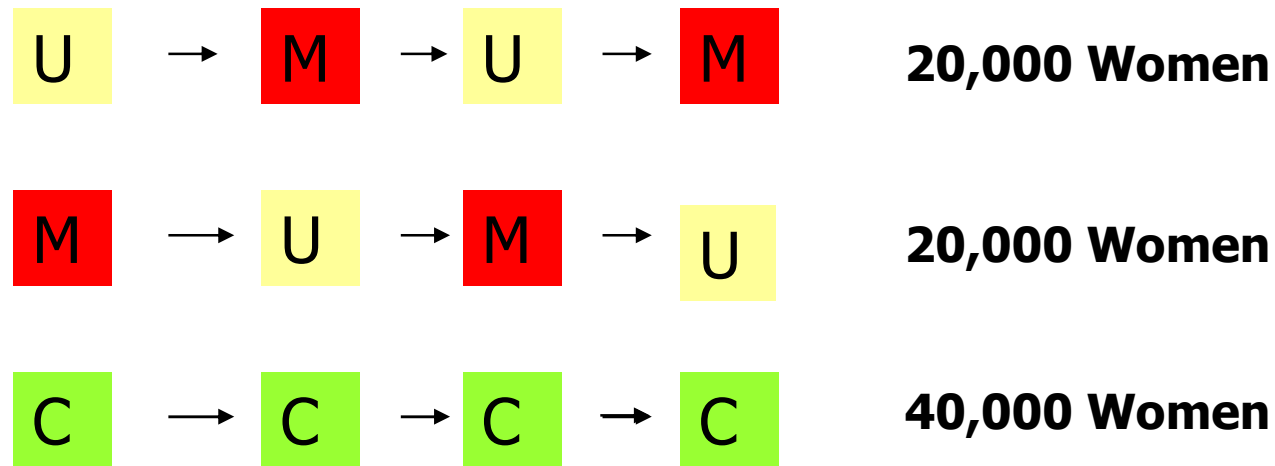
Modality	49 Years or Younger	50 Years or Older
Mammography*	58.0	82.7
PE*	36.0	25.5
US†	78.6	74.0

* Women with both fatty and dense breasts.

† Only women with dense breasts (BI-RADS category 2–4).

Kolb, Radiology, 2002

Population-based, Multi-Center Randomized trial among Women aged 40 – 49 in Taiwan



U :Ultrasound M :Mammography C : Control

Number of Women in the Two Study Groups

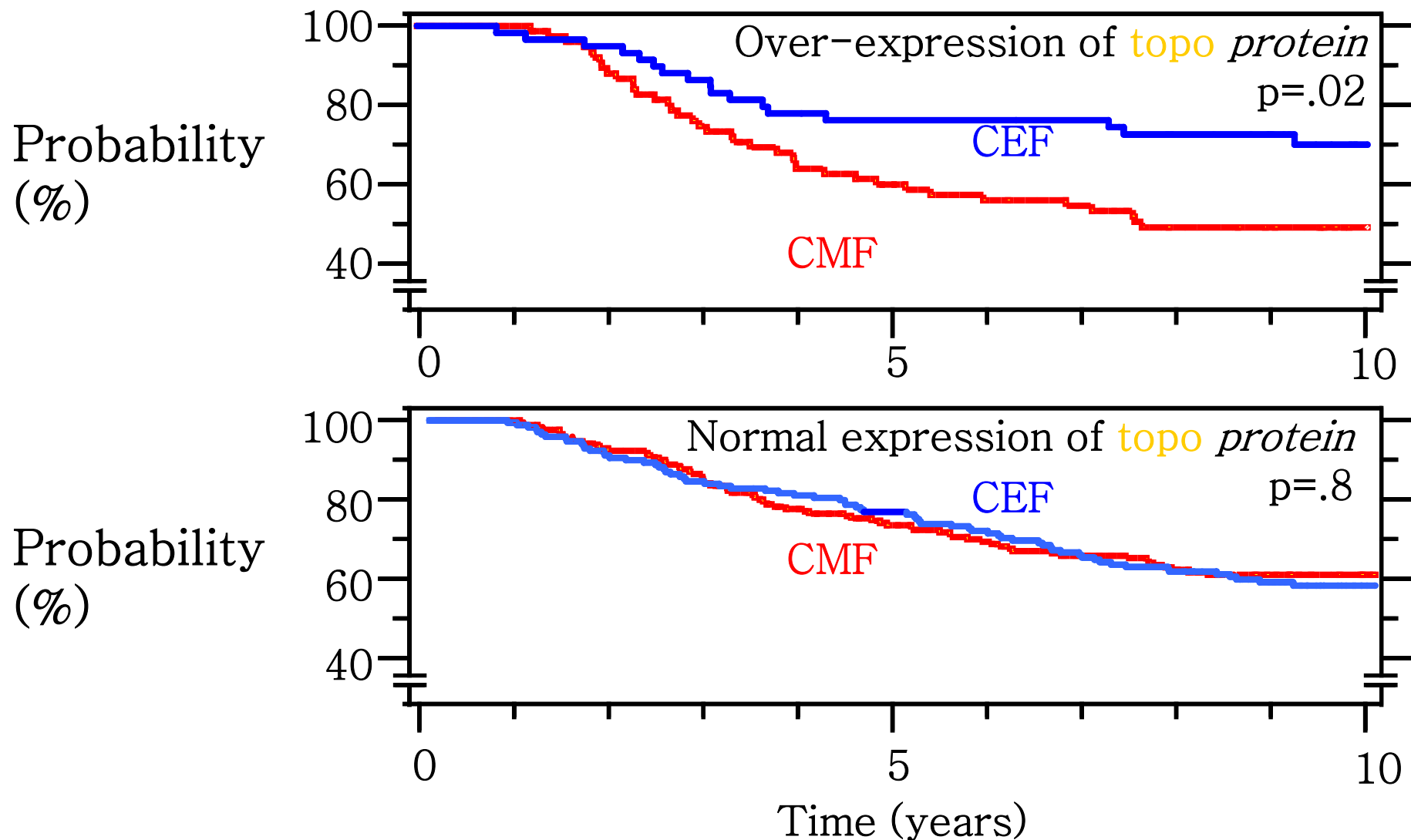
	Ultrasound			Mammography		
	Invitee	Attendee	Attendance rate	Invitee	Attendee	Attendance rate
1st round	20087	11249	56%	20036	11921	59%
2nd round	11879	10074	85%	11216	9549	85%
3rd round	9507	8701	92%	10045	9125	91%
4th round	9066	8177	90%	8667	7577	87%

TaiNAC study

Tailored Neo-Adjuvant Chemotherapy for Breast Cancer

A Randomized Phase III Study of Docetaxel/
Epirubicin versus Tailored Regimens as
Neoadjuvant Chemotherapy for Stage II/III
Breast Cancer with Tumor Size More Than 3 cm

Overall Survival by Treatment and Topo Ila Expression in MA.5 Trial



Topo II α as a Predictive Factor for Anthracycline

- DiLeo et al (Clin Cancer Res, 2002)
- Knoop et al (JCO, 2005)
- Coon et al (Clin Cancer Res, 2002)
- Park et al (Eur J Cancer, 2003)
- Cardoso et al (Int J Oncol, 2004)
- Schindlbeck et al (J Cancer Clin Oncol, 2005)

Tau as Predictive Marker

Low Tau mRNA is associated with pCR to T/FAC chemotherapy on DNA microarray (n = 42,133)^[1, 2]

2004



Tau protects from paclitaxel in vitro^[3]

Low Tau IHC = higher pCR to T/FAC (n = 122)^[3]

2005



Nonprognostic in untreated ER+ cancers (n = 209)^[4]

Low Tau = frequent pCR in ER+ (n = 82)^[4]

Low Tau = lesser benefit from adjuvant tamoxifen in ER+ (n = 267)^[4]

2007



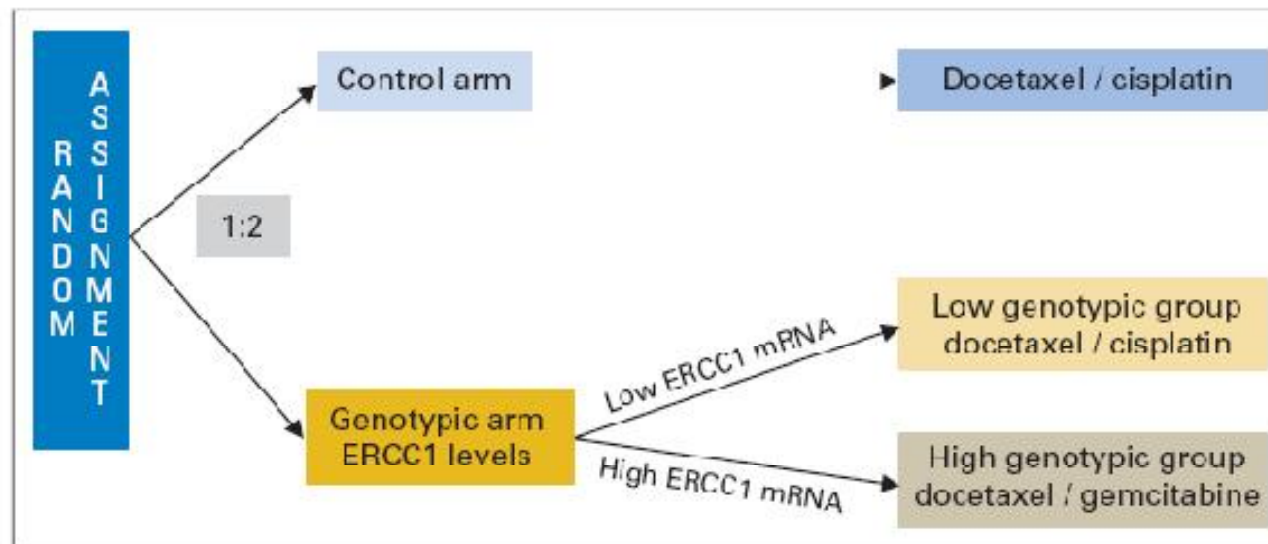
2008
SABCS

1. Ayers M, et al. J Clin Oncol. 2004;22:2284-2293.
2. Hess K, et al. J Clin Oncol. 2006;24:4236-4244.
3. Rouzier R, et al. PNAS. 2005;22:228.
4. Andre F, et al. CCR. 2007;13:2062.

Customizing Cisplatin Based on Quantitative Excision Repair Cross-Complementing 1 mRNA Expression: A Phase III Trial in Non-Small-Cell Lung Cancer

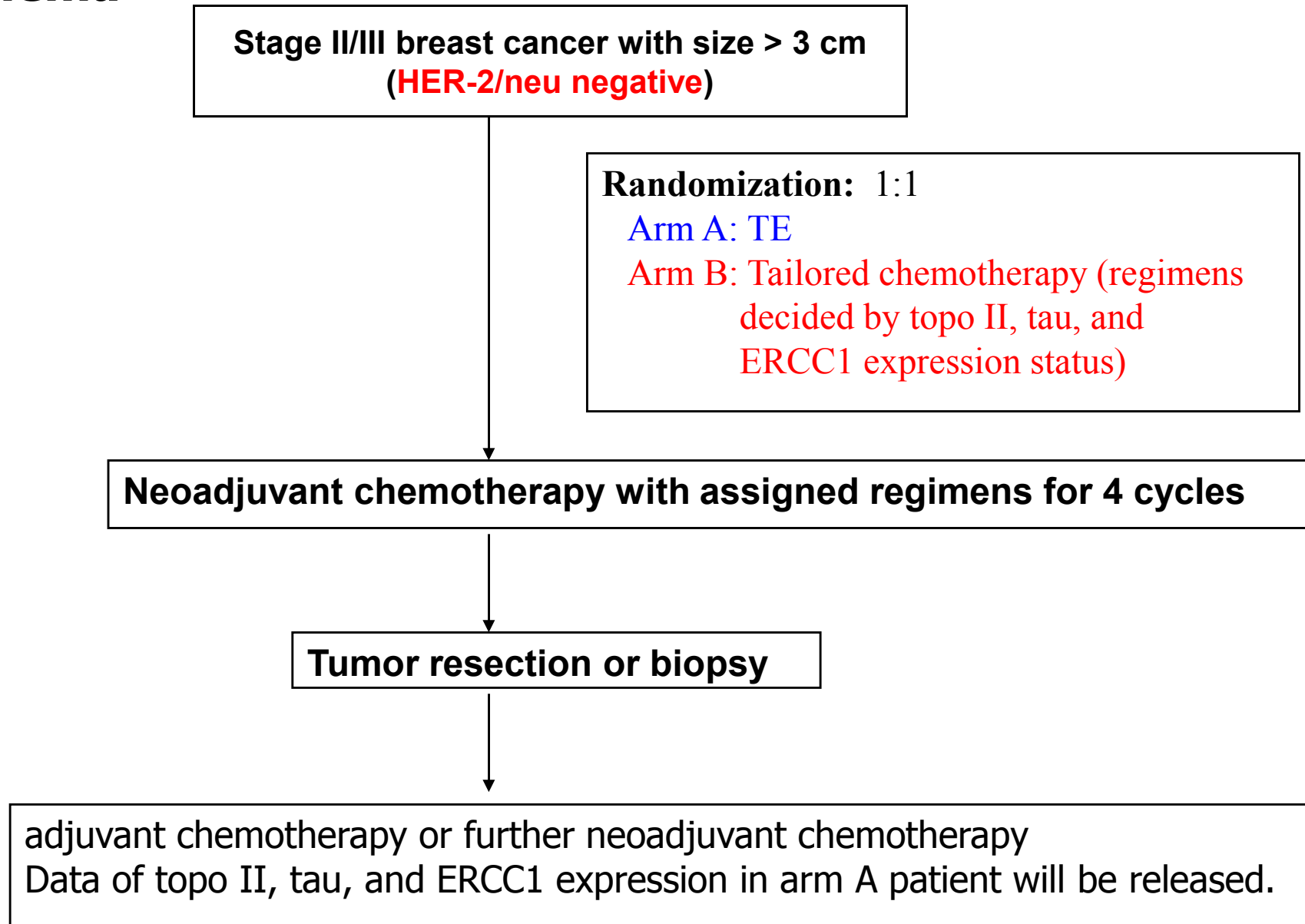
From the Hospital Carlos Haya, Malaga; Hospital Lozano Blesa, Zaragoza; Hospital General de Alicante, Alicante; Catalan Institute of Oncology, Hospital Duran i Reynals; Hospital Clinic; Hospital Vall d'Hebron, Barcelona; Hospital

Manuel Cobo, Dolores Isla, Bartomeu Massuti, Ana Montes, Jose Miguel Sanchez, Mariano Provencio, Nuria Viñolas, Luis Paz-Ares, Guillermo Lopez-Vivanco, Miguel Angel Muñoz, Enriqueta Felip, Vicente Alberola, Carlos Camps, Manuel Domíne, Jose Javier Sanchez, Maria Sanchez-Ronco, Kathleen Danenberg, Miquel Taron, David Gandara, and Rafael Rosell



RR:
39.3% in the control arm
50.7% in the genotypic arm
(P .02).

Schema



Randomization

- 1:1 ratio to receive either TE chemotherapy (control group) or tailored chemotherapy group.
- stratify by Center, ER status (ER+ vs ER-), and T stage (T2 vs T3/T4)

Three markers will be determined by immunohistochemistry

Groups	IHC results	Regimens
Control regimen	Any	TE
Tailored regimens	Tau + topo II + ERCC1 +	E-HDFL
	Tau + topo II + ERCC1 –	EP
	Tau + topo II – ERCC1 +	N-HDFL
	Tau + topo II – ERCC1 –	NP
	Tau – topo II + ERCC1 + or –	TE
	Tau – topo II – ERCC1 +	T-HDFL
	Tau – topo II – ERCC1 –	TP

Remarks: in case of undetermined result, Topo II undermined will be allocated as Topo II (-) ; Tau undermined will be allocated as Tau (-) ; ERCC1 undermined will be allocated as ERCC1 (-).

ORIGINAL ARTICLE

Lapatinib plus Capecitabine for HER2-Positive Advanced Breast Cancer

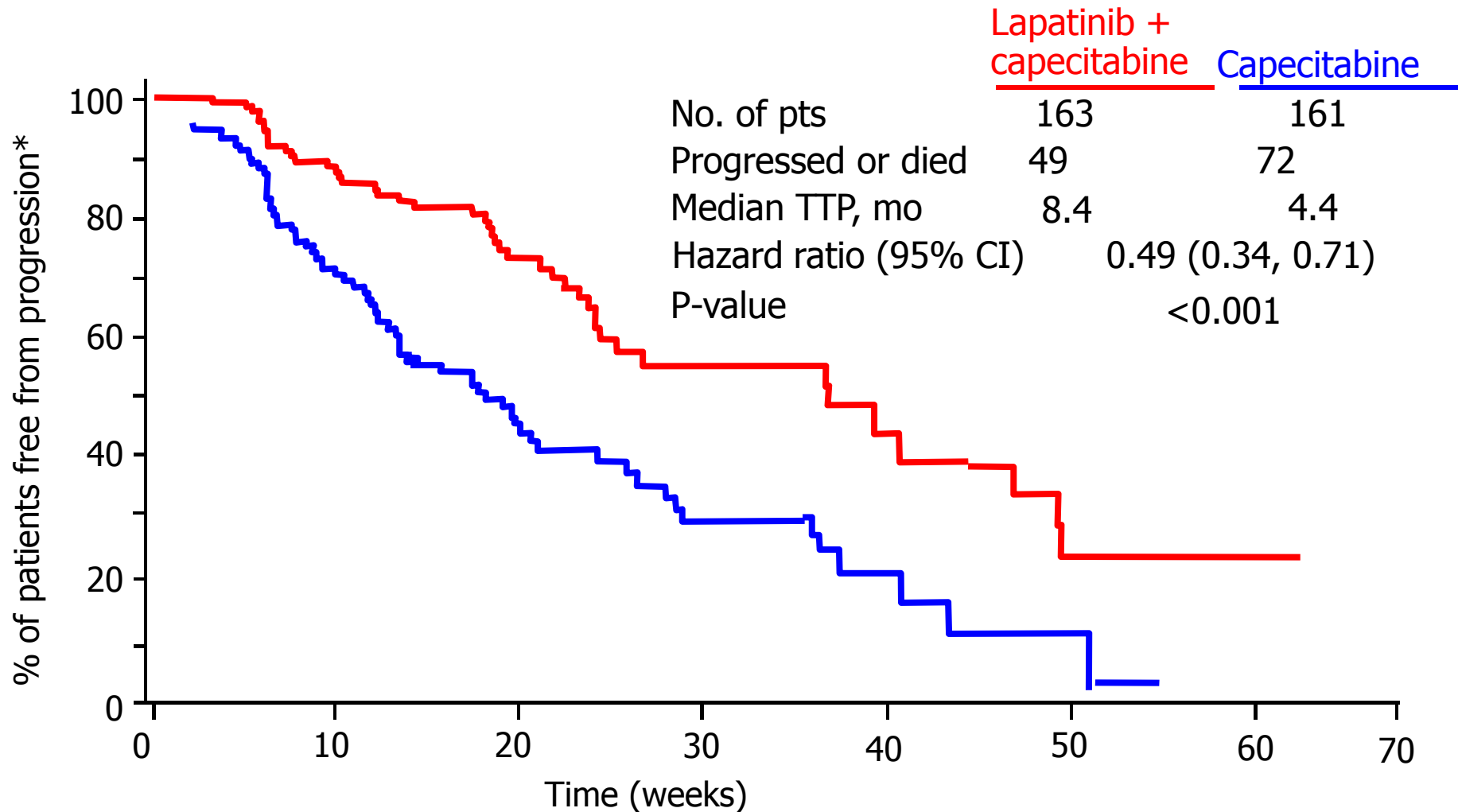
Charles E. Geyer, M.D., John Forster, M.Sc., Deborah Lindquist, M.D.,
Stephen Chan, M.D., C. Gilles Romieu, M.D., Tadeusz Pienkowski, M.D., Ph.D.,
Agnieszka Jagiello-Gruszfeld, M.D., John Crown, M.D., Arlene Chan, M.D.,
Bella Kaufman, M.D., Dimosthenis Skarlos, M.D., Mario Campone, M.D.,
Neville Davidson, M.D., Mark Berger, M.D., Cristina Oliva, M.D.,
Stephen D. Rubin, M.D., Steven Stein, M.D., and David Cameron, M.D.

Study EGF100151

Geyer C, et al. NEJM 2006;355:2733-2743.

Time to progression - ITT population

Independent assessment



Adverse events occurring in $\geq 10\%$ of patients

Event	Tykerb + capecitabine (N=164)			Capecitabine (N=152)		
	All Grades* (%)	Grade 3 (%)	Grade 4 (%)	All Grades* (%)	Grade 3 (%)	Grade 4 (%)
Gastrointestinal disorders						
Diarrhea	60	12	1	39	11	0
Nausea	44	2	0	42	2	0
Vomiting	26	2	0	24	2	0
Stomatitis	15	0	0	12	<1	0
Dyspepsia	11	0	0	3	0	0
Skin and subcutaneous tissue disorders						
Hand-foot syndrome	49	7	0	49	11	0
Rash[†]	27	1	0	15	1	0
Dry skin	11	0	0	5	0	0

*National cancer institute common terminology criteria for adverse events, version 3.

[†]Grade 3 dermatitis acneiform was reported in <1% of patients in Tykerb plus capecitabine group.

Phase I/II Study of Lapatinib in Combination with Oral Vinorelbine for Metastatic Breast Cancer

Phase I part:

Primary objective:

To determine the recommended dose of the combination of oral lapatinib with vinorelbine in patients with ErbB2 positive metastatic breast cancer:

Secondary objectives:

To observe the preliminary response rate

To evaluate the safety profile

Phase II part:

Primary objective:

To determine the progression free survival

Secondary objectives:

To determine the response rate,

To evaluate the safety profile

Study Design:

Open-label phase I/II study

Sample Size:

For **phase I study**, we plan to use the **standard phase I 3-patient cohort (“3+3”) design**. Up to **18** patients may be enrolled

For **phase II study**

Estimated accrued:60

Completed/evaluatable:54

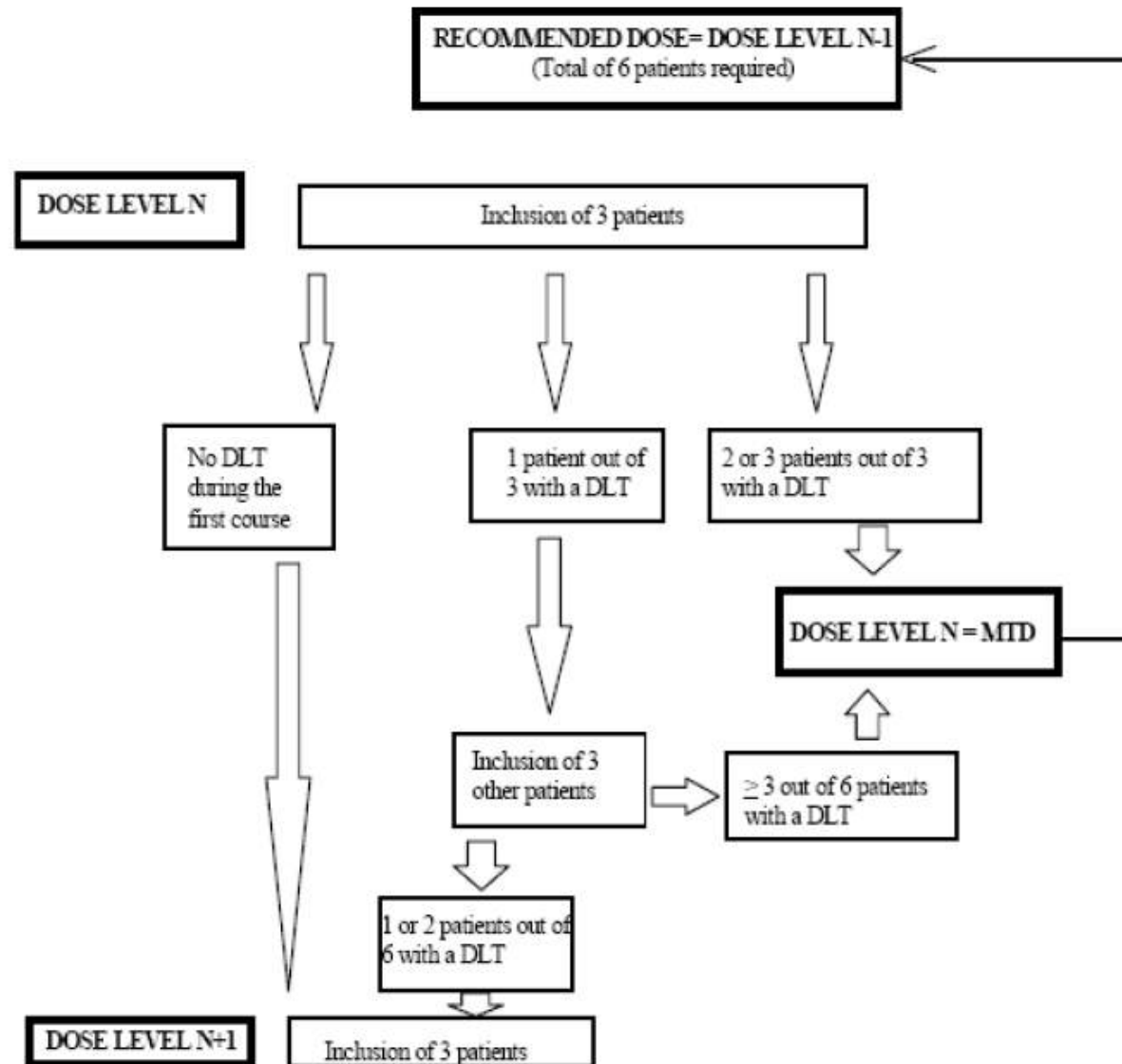
Inclusion Criteria:

1. Histologically confirmed breast adenocarcinoma which is now **metastatic**.
2. Documented **ErbB2 over expression or amplified** disease in the invasive component of the primary or metastatic lesion
3. In **phase II** part, patients must be **chemo-naïve in metastatic setting**. In phase I part, patient may have received prior chemotherapy except vinorelbine in metastatic setting.

Exclusion Criteria:

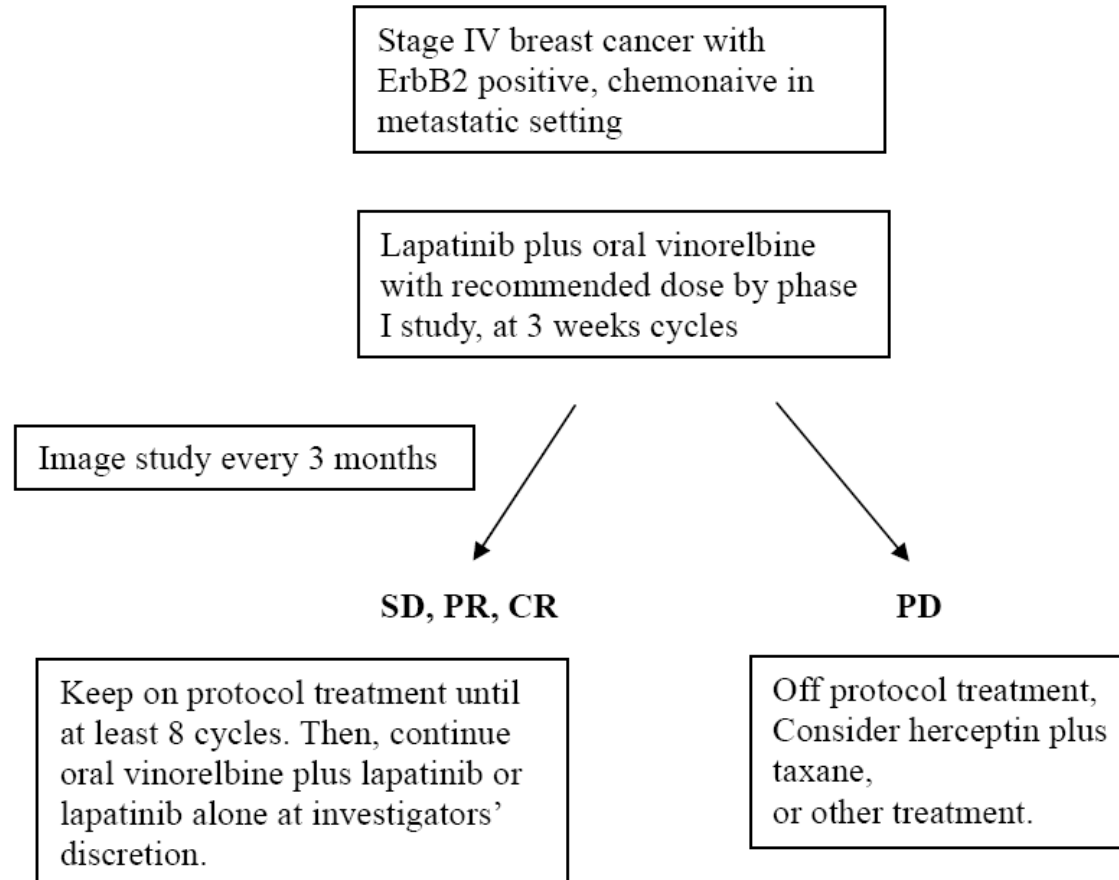
1. Prior therapy with **lapatinib**
2. **CNS metastases**
3. In **phase II** part, patient **exposed to ant-erbB2 targeted therapy in metastatic setting** (Herceptin treatment in the neoadjuvant or adjuvant setting is permitted)

Phase I study: Dose escalation scheme

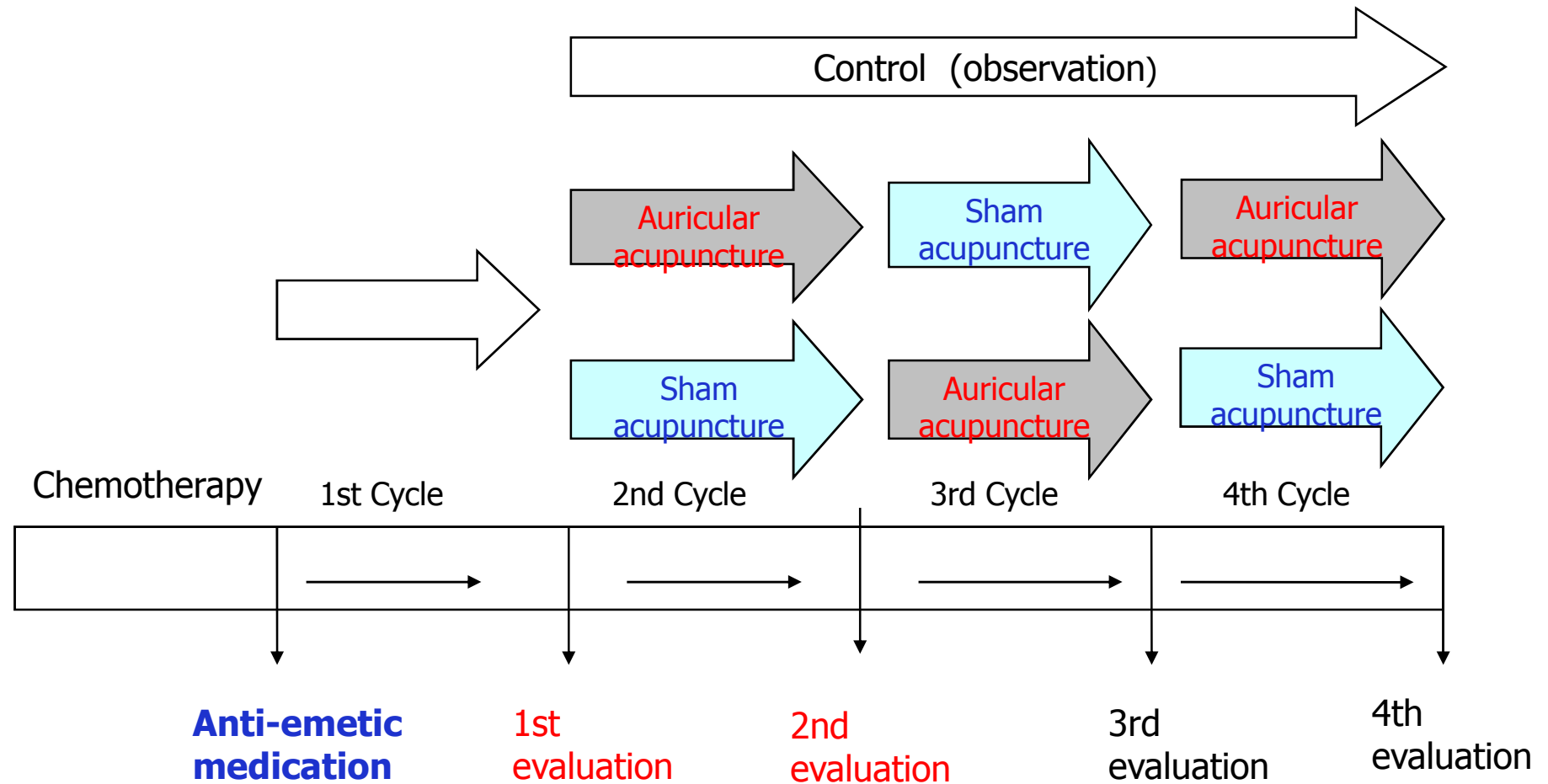


Methodology for phase I part:	Dose level	Vinorelbine (Days 1, 8) (mg/m ²)	Lapatinib (q.d.)
	-I	30	1000
	I	40	1000
	II	50	1000
	III	60	1000
	IV	60	1250
	V	80	1250

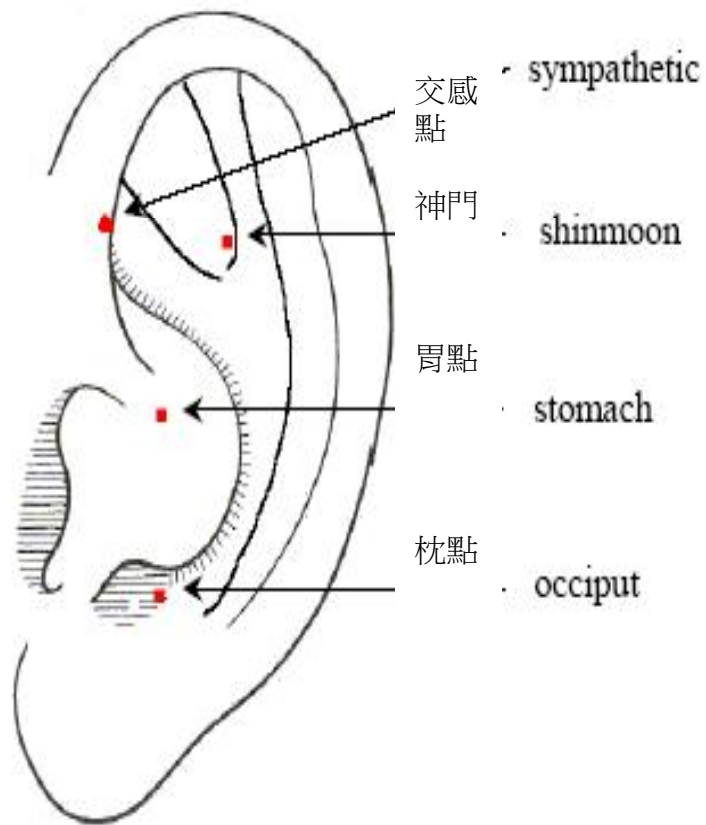
Schema for Phase II part



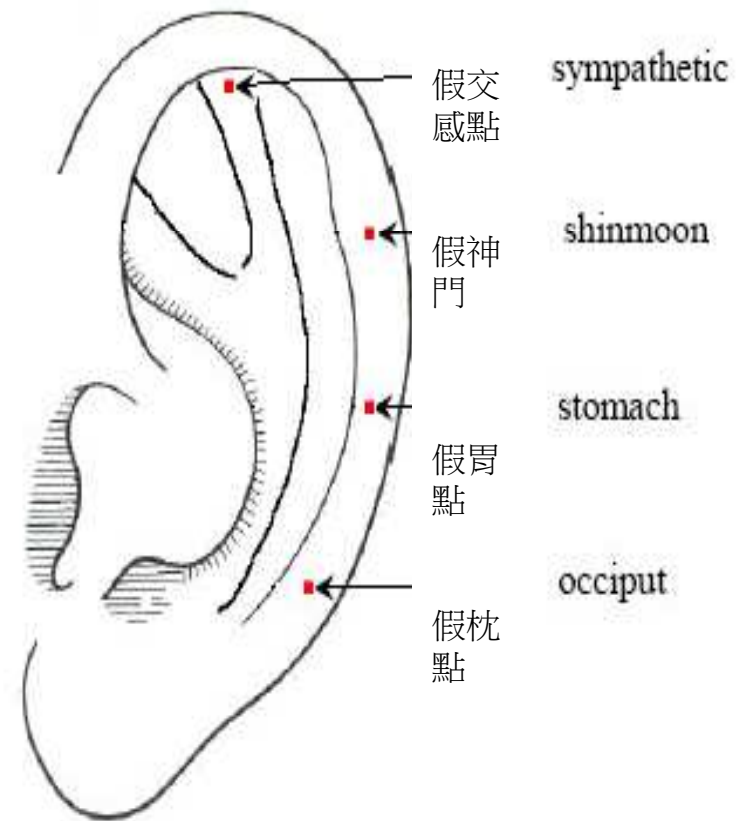
Auricular Acupuncture for the Prevention of Chemotherapy-induced Nausea and Vomiting



AURICULAR ACUPUNCTURE



假 SHAM ACUPUNCTURE



Evaluation of Efficacy

1. visual analog scale (10-cm horizontal visual-analogue) to evaluate the severity of nausea
2. FLIE: emesis-and nausea-specific quality-of life questionnaire (retrospective analysis for the past 5 days)
3. WHO QOL-brief questionnaire
4. daily medication administration records(MAR)

Primary Endpoint:

FLIE score change between 1st and 2nd C/T

Thank You