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PRINCIPAL INVESTIGATOR: Patricia A. Ganz, M.D.

CONTRACTING ORGANIZATION: University of California, Los Angeles
Los Angeles, California 90024

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Patricia A. Ganz, M.D.

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Los Angeles, CA 90024

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Symptoms of estrogen deprivation commonly occur in breast cancer survivors as a result of natural menopause, or menopause that is precipitated prematurely by chemotherapy or anti-estrogen therapy with tamoxifen. In this research program, we are evaluating the role of a comprehensive menopausal assessment (CMA) and intervention program for management of menopausal symptoms in breast cancer survivors. During the past funding year, we have continued recruiting women and randomizing them into the experimental or usual-care groups. The experimental group receives immediate assessment and intervention for their symptoms, while the usual-care group receives no menopause related intervention during a four month period of observation. Systematic assessment of each breast cancer survivor assigned to the intervention group permits treatment of multiple symptoms simultaneously with a variety of non-estrogen pharmacologic, educational and behavioral interventions. We will be assessing the impact of the intervention on quality of life and the resolution of specific menopausal symptoms.

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FOREWORD

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Patricia Gauz 10/1/98

PI - Signature Date

TABLE OF CONTENTS

Introduction

Breast cancer is the leading cause of cancer in women, affecting 1 in 9 women in the U.S. According to the most recent SEER data, women with breast cancer have a relative 5-year survival rate of over 75%. Earlier detection of breast cancer, as well as improvements in post-operative adjuvant therapies, have enhanced the long term survival for women with this diagnosis. Symptoms of estrogen deprivation commonly occur in breast cancer survivors as a result of natural menopause, or menopause that is precipitated prematurely by chemotherapy or anti-estrogen therapy with tamoxifen. Hormone replacement therapy, the most efficacious treatment for these symptoms, is generally contraindicated in breast cancer survivors because of its potential risk of inducing a recurrence of breast cancer. Thus, many breast cancer survivors endure considerable morbidity and impaired quality of life (QL) as a result.

This research program will evaluate the role of a comprehensive menopausal assessment (CMA) and intervention program for management of menopausal symptoms in breast cancer survivors. Using a randomized controlled design, we will assign symptomatic postmenopausal breast cancer survivors to an experimental or usual-care group. The experimental group will receive immediate assessment and intervention for their symptoms while the control group will receive no menopause related intervention during a four month period of observation. Systematic assessment of each breast cancer survivor assigned to the intervention will permit treatment of multiple symptoms simultaneously with a variety of non-hormonal pharmacologic, educational and behavioral interventions. The intervention program will be portable, and suitable for implementation in a variety of health care settings. We will evaluate the impact of the intervention on QL and the resolution of specific menopausal symptoms. QL will be assessed using standardized measures of health status, mood, and sexual functioning. Menopausal symptoms will be monitored using self-report diary cards. Our primary hypothesis is that the intervention program will lead to significant improvement in QL for breast cancer survivors.

Progress report on fourth year of funding

Recruitment and Subject Characteristics

During the past year, we continued accruing subjects for the randomized trial. As of October 1, 1998, a total of 197 women have been screened over the telephone. Of those, 121 (61%) were eligible and interested in participating in the study.

Women were found ineligible for four main reasons: Inadequate target symptoms (38%), Refusal to try our study medications (26%), Medical ineligibility (24%), and Already tried all our study medications (7%). There are no significant differences between the 76 ineligible women and the 121 eligible women in age, ethnicity, marital status, or tamoxifen use. Below are some demographic statistics from the two groups.

	Eligible (N=121)	Not Eligible (N=76)
Mean Age	53.8	54.4
% White	88.4%	88.2%
% Married	63.6%	71.0%
% Currently Taking Tamoxifen	53.7%	48.0%

The current status of these 108 eligible women is as follows:

68 have completed the study
- 31 in the experimental group
- 37 in the usual care group

4 are currently in the study (and are expected to finish by 12/98)

21 have dropped out voluntarily
- 8 had no time or were too busy
- 13 had other reasons

28 were determined to be ineligible for the study after an in-person evaluation
- 9 had inadequate target symptoms
- 8 had psychiatric difficulties
- 5 cancelled their appointments and refused to reschedule
- 3 were medically ineligible
- 2 refused to take study medications
- 1 had a problem filling in our forms

The attached Tracking Flow Chart (on page 8) gives more detail about how many women have completed each phase of the study. There are currently only four women who are still in the study, and recruitment is now closed. We anticipate that these women will complete the study by December, 1998, bringing our total sample size to n=72. According to our sample size calculations, this sample size will be great enough to detect a significant difference between interventions and controls on our two main outcomes: the MOS vitality scale, and a scale we created by summing seven BCPT items related to our target symptoms. These seven symptoms are: hot flashes, difficulty with bladder control when laughing or crying, difficulty with bladder control at other times, genital itching/irritation, vaginal dryness, pain with intercourse, and night sweats.

Target Symptoms in Study Subjects

The three target symptoms under evaluation in this study are hot flashes, vaginal dryness and urinary incontinence. Among the 121 women eligible at the telephone screener, 90% reported severe hot flashes, 41% reported vaginal dryness and 16% reported stress incontinence. Forty percent of entering women reported two or more of these symptoms. During the study, women report the frequency and severity of their target symptoms on baseline and follow-up questionnaires and also on diary cards, which they fill out on a daily basis for the four weeks preceding their baseline and their follow-up visits. Change in symptoms over time will be described in the two study groups.

Work in Progress

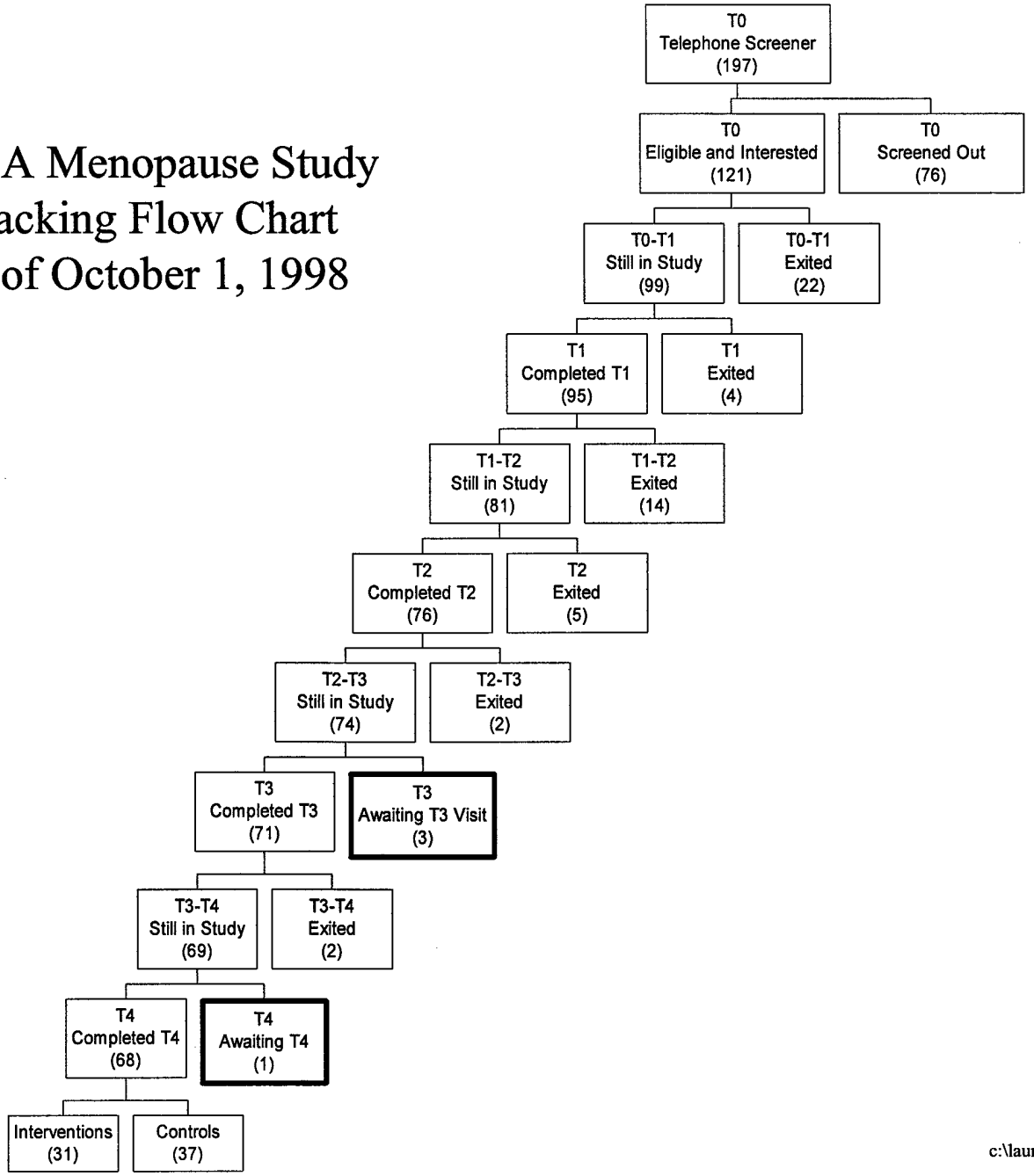
Three papers from this study are in various stages of completion. We are almost finished writing a paper, which was described in last year's continuation report, about the creation of the atrophy and inflammation scales from the Vaginal Exam Form. We are currently writing a paper on the effect of tamoxifen on vaginal symptoms and examination. Finally, we are also beginning an analysis of the use of alternative therapies, such as herbal remedies, special diet, and psychosocial therapies from the baseline visit data. This year, we also plan to begin the outcome analysis, comparing the effectiveness of the Comprehensive Menopausal Assessment (CMA).

Conclusion

As of December, 1998, we will be completely finished collecting data, and plan to spend the next year concentrating on data analysis and writing papers. We plan to report on several topics, including use of alternative therapies, effectiveness of the CMA, and evaluation of the hormonal data. This study is rich in data, and is sure to produce some interesting results.

Although this was the final year of funding, we have applied for and received a no-cost extension in order to complete our analyses. We will report our final findings next year.

UCLA Menopause Study
Tracking Flow Chart
As of October 1, 1998



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