Non-Interventional Study (NIS) Report Synopsis

NIS Name/Code NIS-OCN-ARI-20081

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A Prospective, Multicentre, Controlled, Observational Study to Evaluate the Performance of Patient Support Programme (PSP) in Improving Patient Adherence with Adjuvant Aromatase Inhibitors (AI) medication for Postmenopausal, Early Stage Breast Cancer

Study dates:

First subject enrolled: 26 Sept 2008
Last subject last visit: 27 Oct 2010

Study Sites

This observational study was conducted at 20 sites including 10 sites covered by the PSP and 10 sites with no systematic PSP in place. Sites in two groups are in general matched in terms of cities and hospital levels.

The investigators from these 20 sites are general surgeons, breast surgeons, or medical oncologists specialized in breast cancer.

Publications

None at the time of writing this report.

Objectives and criteria for evaluation

Table S1 Primary and secondary objectives and outcome variables

Objectives	Outcome variables
Primary To compare the 1-year adherence rate to upfront adjuvant AI for postmenopausal, early stage breast cancer patients in the two observational arms: Standard Treatment and Standard Treatment plus PSP arm after one year	**Primary** To compare the adherence rate on the upfront adjuvant AI medication after one year, defined as the proportion of days covered by prescription refills for AI over the 364 days following the initiation of AI prescription.
Secondary	**Secondary**
• To compare the changes of BMQ scores from baseline to 1 year between the two observational arms	• Changes of BMQ scores from baseline to 1 year generated from questionnaire
• To assess time to treatment discontinuation of upfront adjuvant AI medication in the two observational arms	• Time to treatment discontinuation, defined as the date of last intake of AI tablet (same as the AI prescribed in an upfront and continuous manner) minus date of the initiation of AI prescription plus one
• To identify reasons for treatment discontinuation on upfront adjuvant AI medication in the two observational arms	• Reasons for discontinuation (recurrence, death, subject's wish, physician's recommendation and specification of reasons, interactions with concomitant medication, adverse events, a record of newly prescribed hormone medication, unfilled AI prescription, other)
• To identify reasons for treatment interruption from upfront adjuvant AI medication in the two observational arms	• Reasons for interruption (subject's wish, physician's recommendation and specification of reasons, interactions with concomitant medication, adverse

Objectives	Outcome variables
	events, unfilled AI prescription, other).
• To investigate the relationship between Scores in Patient Centred Care Questionnaire (PCCQ) and patient's adherence after 1 year	• The relationship between Scores in Patient Centred Care Questionnaire (PCCQ) and patient's adherence after 1 year generated from questionnaire
• To assess the correlation of scores according to Morisky (Morisky 1986) scale with 1-year adherence	• The correlation of scores according to Morisky (Morisky 1986) scale with 1-year adherence generated from questionnaire\
• To assess the correlation of responses to single-item questionnaire (Grunfeld 2005) with 1-year adherence	• The correlation of responses to single-item questionnaire (Grunfeld 2005) with 1-year adherence generated from questionnaire

Study design

This is a prospective, multicentre, controlled, observational study to evaluate the performance of PSP in improving patient adherence to upfront adjuvant AI for postmenopausal, early stage breast cancer. Eligible patients from 10 sites already covered by the PSP as part of the sites' normal treatment practice constitute the standard treatment plus PSP arm. Other 10 sites with no systematic PSP in place enrolled patients for forming the standard treatment arm.

Target subject population and sample size

Postmenopausal women with hormone sensitive early breast cancers to whom have been prescribed upfront adjuvant AI medication (aromatase inhibitors; anastrozole or letrozole) according to the current product SmPC. The upfront AI medication must not have exceeded eight weeks.

Approximately 524 postmenopausal women diagnosed with hormone sensitive early breast cancer that have been prescribed with upfront AI medication will be enrolled across 20 sites with 262 subjects in each group.

Statistical methods

Two-sided test will be used with a significance level of 0.05, and all confidence interval is 95% unless otherwise specified. Continuous variables will be analyzed using mean, std, median, minimum and maximum values. Categorical variables will be analyzed using the frequency and percentages.

Subject Dispositions

516 patients were enrolled, 264 of which were enrolled into standard treatment group, and 252 of which were enrolled into standard treatment plus PSP group. 262 patients in the standard treatment group and 241 patients in the standard treatment plus PSP group were included into ITT population set. 251 patients in the standard treatment group and 223 patients in the standard treatment plus PSP group were included into PP population set.

Summary of results

Primary results

Analysis based on ITT population, there was no significant difference of 1-year adherence rate between the two groups (P>0.05). The means of adherence rate were 95.87% in standard treatment and 95.82% in standard treatment plus PSP group. The adjusted means with ANCOVA model of adherence rate were 95.87% in standard treatment group and 95.83% in standard treatment plus PSP group. With p-value as 0.1930 the model can't be fitted hence we cannot conclude that recurrence risk or BMQ scores has effect on the adherence rate.

Secondary results

- Analysis based on ITT population, there was no significant difference in the change of BMQ scores from base line between the two groups (P>0.05).
- Analysis based on ITT population, the means of time to treatment discontinuation were 231.20 days in standard treatment group and 227.75 days in standard treatment plus PSP group. There was no significant difference between the two groups (P>0.05).
- Analysis based on ITT population, there was no significant difference in the reason for treatment discontinuation between the two groups (P>0.05).
- Analysis based on ITT population, the result of this analysis on reason for interruption is similar.
- Analysis based on ITT population, there was positive relationship between PCCQ (Part9) and adherence (P=0.0352, OR=3.878), indicating that the adherence rate of the patients with whom the doctor always or usually spend time is greater than that of the patients with whom the doctor sometimes or never spend time.
- Analysis based on ITT population, there was the significant effect in the stepwise multiple linear regressions model (P<0.0001) and the stepwise multiple linear regression model is:

Adherence rate(Y) = -0.00704*Morisky Scores+0.98428, indicating that there were negative correlation between Morisky scores and adherence rate which means that better intention to comply with doctors' advice on medications will result in better adherence.

- Analysis based on ITT population, there was no independent variables met the 0.1 significance level for entry into the model, so the model can't be fitted hence we cannot conclude that there's correlation of response to single-item questionnaire with the adherence rate.

Safety result

AZ Drug Safety department received 2 reports regarding Adverse Drug Reactions related to AZ products (Arimidex) of all the patients enrolled. One is bone pain and the other is transaminases increase. Both are known adverse reactions listed in Prescribing Information of Arimidex.