Non-interventional Study Report Synopsis	
Drug Substance	Arimidex
Study Code	NIS-OKR-DUM-2009-1
Edition Number	1.0
Date	28 June 2010

10- year CHD risk evaluation and its treatment pattern analysis in postmenopausal early breast cancer patients taking aromatase inhibitors

Study dates: First subject In: 12 May 2009
Last subject last visit: 23 March 2010

Phase of development: NA

This study was performed in compliance with Good Clinical Practice, including the archiving of essential documents.

Study centre(s)

There were 1112 patients at 52 centers in Korea.

Publications

None at the time of writing this report.

Objectives and criteria for evaluation

Table S1 summarises the variables of this study, and shows how they relate to the study objectives.

Table S1 Primary and secondary objectives and outcome variables

Objectives	Outcome variables	Type
Primary	**Primary**	
To define 10-year CHD risk according to Framingham risk score in postmenopausal early breast cancer patients who were taking aromatase inhibitors as adjuvant treatment	Framingham risk score	
Secondary	**Secondary**	
To describe 10-year CHD risk assessed by Faminham risk score comparing to the historical data of 10-year cancer-specific mortality in breast cancer	10-year cancer-specific mortality in breast cancer (historical data)	
To analyse the management patterns of patients according to defined 10-year CHD risk categories	Treatment for CHD risk (lifestyle changes: diet, weight management, and physical activity, drug therapy: antihypertensive drug, aspirin and lipid lowering drug)	
To assess the relationship CHD risk and concomitant medication (anthracycline, trastuzumab etc) use	Concomitant medication (anthracycline, trastuzumab etc)	

Study design

This study was a multi-center, retrospective, chart review study.

Target subject population and sample size

The target population was the postmenopausal patients with early breast cancer, who were taking aromatase inhibitors within 6 months since starting as an adjuvant treatment after surgery.

Investigational product and comparator(s): dosage, mode of administration and batch numbers

NA

Duration of treatment

NA

Statistical methods

For evaluating 10-year CHD risk with Framingham risk score amongst the patients taking aromatase inhibitors as an adjuvant hormonal treatment for their postmenopausal early breast cancer in the beginning of hormonal treatment stage, the risk was categorized like the following;

- Framingham 10-year risk was < 5%
- Framingham 10-year risk was ≥ 5% and ≤ 10%
- Framingham 10-year risk was > 10%

All patients were categorized according their risk score and the frequency was described by the groups mentioned above, respectively.

For lifestyle changes and drug therapy, chi-square test was performed to test homogeneity among Framingham 10-year risk categories.

Subject population

A total of 1112 were evaluated in this study.

The demographic and background characteristics of study subjects are summarized in Tables S2. The mean age, weight and height were 57.2years, 59.1kg and 156.4cm, respectively. The total number of stage I, IIa, and IIb subjects with breast cancer were 566(50.9%), 421(37.9%), and 125(11.2%), respectively. And the age at onset of breast cancer was 56.4years.

Table S2 Demographic and background characteristics

		N=1112
Age(years)	Mean [SD]	57.2 [8.2]
Height(cm)	Mean [SD]	156.4 [5.5]
Weight(kg)	Mean [SD]	59.1 [8.1]
BMI(kg/m^2)	Mean [SD]	24.2 [3.3]
Age at onset of breast cancer (years)	Mean [SD]	56.4 [8.4]
Age at operation of breast cancer(years)	Mean [SD]	56.5 [8.4]
Stage	I, n(%)	566(50.9%)
	IIA, n(%)	421(37.9%)
	IIB, n(%)	125(11.2%)

Summary of results

The lifestyle change distribution for CHD risk treatment was as follows: The number of patients who performed the weight management, physical activity, and diet within one year was 180(16.2%), 231(20.8%), 244(21.9%), respectively.

Table S3 Lifestyle changes

	N=1112 n(%)
Weight management	180(16.2)
Physical activity	231(20.8)
Diet	244(21.9)

The number of patients who were taking antihypertensive drug, lipid lowering drug, and aspirin for CHD risk treatments was 237(21.3%), 86(7.7%), and 80(7.2%), respectively.

Table S4 Drug therapy

	N=1112 n(%)
Antihypertensive drug	237(21.3)
Lipid lowering drug	86(7.7)
Aspirin	80(7.2)

The following categories based on Framingham 10-year risk score were presented: <5% (85.5%), 5%~10% (10.7%), and >10% (3.8%). The median 10-year CHD risk according to Framingham risk score in postmenopausal early breast cancer patients who were taking aromatase inhibitors as adjuvant treatment was 1%.

Table S5 Framingham risk score

10-year risk	N=1112 n(%)	N=362*
<5%	951(85.5)	
5% ~ 10%	119(10.7)	
>10%	42(3.8)	

Median	1%	3%

* Age at onset of breast cancer ≥ 60years

The 10-year CHD risk in patients who performed weight management and physical activity was relatively low.

Table S6 Framingham risk score by lifestyle change

	Weight management		Physical activity		Diet	
10-year risk	Yes N=180 n(%)	No N=932 n(%)	Yes N=231 n(%)	No N=881 n(%)	Yes N=244 n(%)	No N=868 n(%)
<5%	165(91.7)	786(84.3)	207(89.6)	744(84.5)	205(84.0)	746(85.9)
5% ~ 10%	147(7.8)	105(11.3)	21(9.1)	98(11.1)	31(12.7)	88(10.1)
>10%	1(0.6)	41(4.4)	3(1.3)	39(4.4)	8(3.3)	34(3.9)
Median	1%	1%	1%	1%	1%	1%
p-value*	0.0138		0.0493		0.4817	

* Chi-square test

While the rate of patients who had drug therapy is higher than the rate of patients who had not drug therapy in moderate (5%~10%) or severe(>10%) 10-year CHD risk group, the rate of patients who had drug therapy is lower than the rate of patients who had not drug therapy in mild (<5%) 10-year CHD risk group.

Table S7 Framingham risk score by drug therapy

	Antihypertensive drug		Lipid lowering drug		Aspirin	
10-year risk	Yes N=237 n(%)	No N=875 n(%)	Yes N=86 n(%)	No N=1026 n(%)	Yes N=80 n(%)	No N=1032 n(%)
<5%	140(59.1)	811(92.7)	60(69.8)	891(86.8)	48(60.0)	903(87.5)
5% ~ 10%	65(27.4)	54(6.2)	12(13.9)	107(10.4)	17(21.3)	102(9.9)
>10%	32(13.5)	10(1.1)	14(16.3)	28(2.7)	15(18.8)	27(2.6)
Median	4%	1%	2%	1%	3%	1%
p-value*	<0.0001		<0.0001		<0.0001	

* Chi-square test

The relationship between CHD risk and concomitant medication (anthracyline, taxane, cardioprotective agent etc) use was investigated.

Overall, the CHD risk in subjects who took concomitant medication was lower than that in subjects who didn't take concomitant medication. In case of anthracyline, there was statistically significant difference.

Table S8 Framingham risk score by concomitant medication

	Anthracyline		**Taxane**		**Cardioprotective agent**	
10-year risk	Yes N=391 n(%)	No N=721 n(%)	Yes N=193 n(%)	No N=919 n(%)	Yes N=105 n(%)	No N=1007 n(%)
<5%	358(91.6)	593(82.2)	173(89.6)	778(84.7)	96(91.4)	855(84.9)
5% ~ 10%	26(6.7)	93(12.9)	14(7.3)	105(11.4)	8(7.6)	111(11.0)
>10%	7(1.8)	35(4.9)	6(3.1)	36(3.9)	1(1.0)	41(4.1)
Median	1%	1%	1%	1%	1%	1%
p-value*	0.0001		0.1890		0.1386	

* Chi-square test