Questionnaire: Use of adjuvant chemotherapy for breast cancer based on the results of genomic/immunohistochemical tests

A team of researchers at the University of Sheffield is undertaking an assessment of the clinical and cost-effectiveness of alternative risk stratification tests for ER-positive, HER2-negative women with early breast cancer. The cost-effectiveness analysis element of this work requires estimates of the proportion of patients who go on to receive adjuvant chemotherapy based on the results of these tests.

Please consider the following three populations of women with ER-positive, HER2-negative with early breast cancer:

(1) Node-negative NPI<3.4

(2) Node-negative NPI>3.4

(3) Node-positive (1-3 nodes)

Based on your own subjective opinion, please estimate the probability that a woman in each of these subgroups and with each genomic/immunohistochemical test result would go on to receive adjuvant chemotherapy. Please complete both Tables 1 and 2.

Table 1:   Chemotherapy decisions based on risk score for tests which give 3 classifications (e.g. Oncotype DX, Prosigna)

Risk score	Probability patient with test result would receive chemotherapy		
	(1) Node-negative NPI<3.4	**(2) Node-negative NPI>3.4**	**(3) Node-positive (1-3 nodes)**
Low-risk	PLEASE COMPLETE	PLEASE COMPLETE	PLEASE COMPLETE
Intermediate-risk	PLEASE COMPLETE	PLEASE COMPLETE	PLEASE COMPLETE
High-risk	PLEASE COMPLETE	PLEASE COMPLETE	PLEASE COMPLETE

Table 2:   Chemotherapy decisions based on risk score for tests which give 2 classifications (e.g. MammaPrint and EndoPredict)

Risk score	Probability patient with test result would receive chemotherapy		
	(1) Node-negative NPI<3.4	**(2) Node-negative NPI>3.4**	**(3) Node-positive (1-3 nodes)**
Low-risk	PLEASE COMPLETE	PLEASE COMPLETE	PLEASE COMPLETE
High-risk	PLEASE COMPLETE	PLEASE COMPLETE	PLEASE COMPLETE

Survey results

Eleven oncologists completed the questionnaire. The mean probabilities obtained from the survey are presented in Tables 3 and 4.

Table 3:   **Chemotherapy decisions based on risk score for tests which give 3 classifications (e.g. Oncotype DX, Prosigna)**

Risk score	Probability patient with test result would receive chemotherapy		
	(1) Node-negative NPI<3.4	**(2) Node-negative NPI>3.4**	**(3) Node-positive (1-3 nodes)**
Low-risk	0%	4%	41%
Intermediate-risk	20%	41%	72%
High-risk	77%	91%	95%

Table 4:   **Chemotherapy decisions based on risk score for tests which give 2 classifications (e.g. MammaPrint and EndoPredict)**

Risk score	Probability patient with test result would receive chemotherapy		
	(1) Node-negative NPI<3.4	**(2) Node-negative NPI>3.4**	**(3) Node-positive (1-3 nodes)**
Low-risk	1%	14%	36%
High-risk	74%	91%	96%