

Overcoming Barriers in Evaluating Health-Related Quality of Life in Lung Cancer – Assessing the Attitudes of Patients, Physicians, and Nurses Using a Computer-Assisted QL Instrument (LCSS-QL) in Non-Small Cell Lung Cancer: Results from the Asian-Pacific QL Trial

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Keywords: Quality of Life (QOL), Non-Small Cell Lung Cancer (NSCLC), Docetaxel, NSCLC

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www.2009worldlungcancer.org/

1. Backgrounds

Quality of Life Assessment in Practice - Background -

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QUALITY OF LIFE ASSESSMENT IN PRACTICE - Survey Assessing Physician Views of Barriers -

- Survey mailed to 260 senior oncologists in Australia, New Zealand, and Hong Kong; 154 (59%) responded.
- 80% believed QL information should be collected before starting treatment, **but:**
 - Fewer than 50% did so
 - Fewer than 50% used QL to monitor patients
- Barriers reported:
 - Time constraints
 - Resource constraints
 - Perceived lack of an appropriate instrument

Ref: Morris et al., *Quality of Life Research* 1998

Background of HRQL Measure

- The Lung Cancer Symptom Scale (LCSS) is a validated and extensively used paper measure.
 - An independent review: "...it is surely one of the most well-validated measures available in oncology" (Earl & Weeks, 2005).
- Valid QL instruments are available; however, low feasibility in typical treatment settings remains a barrier to QL assessment.
 - In a recent Mayo Clinic publication: "...item response rate for all 9 LCSS questions was 94.2% ..." in 650 patients (Svobodnik, 2004).
- The LCSS is available in 50+ languages, making it feasible to collect reliable QL data in international trials, and for use in most countries.
- The LCSS has been converted into a computerized format for a simple hand-held device (pocket PC), called the LCSS-QL.

QUALITY OF LIFE ASSESSMENT IN PRACTICE - Objectives -

- Determine the feasibility of implementing an electronically assisted Quality of Life method in patients receiving initial chemotherapy for lung cancer
 - Trial designed to overcome known barriers
 - Perform as an 'Effectiveness' trial

- Correlate QL and PROs with standard chemotherapy outcomes (response rate and survival)
 - Also examine the effect on QL for the whole group over time

- Explore whether having real-time QL data by patient visit can lead to earlier recognition of benefit - or lack of benefit - of treatment, with an influence on clinical decision-making and resource utilization

QUALITY OF LIFE IN CANCER

- Quality of Life as the Primary Trial Endpoint -

- **Plan is to enlist 710 patients with Lung Cancer in 8 Asian countries at 43 sites, receiving their initial chemotherapy (with docetaxel-containing regimens)**
 - To date, results from 1/3 of the patients have been analyzed
- **Electronic LCSS-QL administered every 3 weeks**
 - Validated lung cancer instrument designed for use in practice and in clinical trials
 - Practical, requiring only 2 – 4 minutes for completion
 - Computer: no transcription, immediate results
- **Evaluate:**
 - Feasibility
 - QL correlation with survival and chemotherapy response
 - Does QL assist in decision-making and patient management?

Efficacy vs. Effectiveness - AP-QL Lung Trial * -

Efficacy trial = “best case scenario”
(conditions controlled)

* **Effectiveness trial = “real-world scenario”**
(conditions not controlled)

Fidelity of Handheld Method

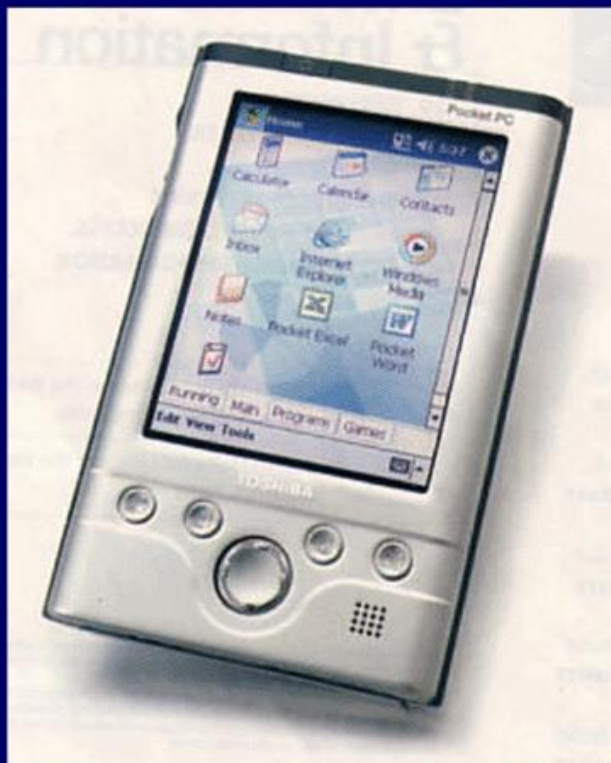
- **IT person** to help train staff to use handheld pc and monitor use, including backing up database
- **IT log** by e-mail for multi-site study or practice to ensure continuity of information across sites
- **Planned quality checks** to ensure adherence to method and reduce need for any corrective actions

2. Methods

Assessing Quality of Life in Trials and Practice - Using a Convenient and Inexpensive Hand-Held PC - Methods -

Using a Convenient and Inexpensive Hand-Held PC

ASSESSING QUALITY OF LIFE IN TRIALS AND PRACTICE - Using a Convenient and Inexpensive Hand-Held PC -



ASSESSING QUALITY OF LIFE IN TRIALS AND PRACTICE
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Doe, John 05/07/1950
LCSS: Patient Scale

例如:
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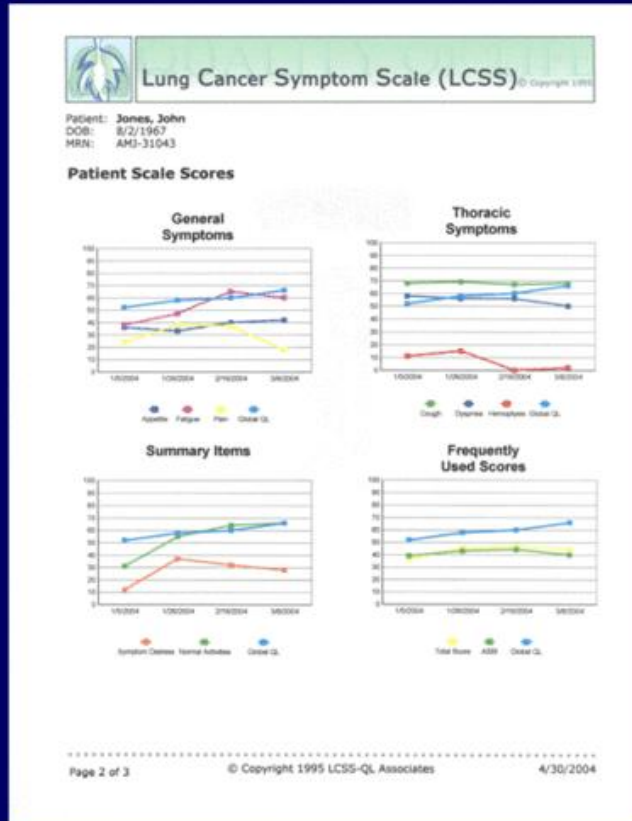
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See: www.LCSS-QL.com

ASSESSING QUALITY OF LIFE IN TRIALS AND PRACTICE - LCSS-QL Print-Out or Computer Screen from a Hand-Held PC -



3. Results

Results panels viewed by clicking >read more

Patient Demographics (N = 243)

AP QL Study in Lung Cancer - Patient Demographics (N = 243) -

AGE:	
Median (Range)	58 (26 – 81)
GENDER:	
Male	72%
Stage:	
IIIB	23%
IV	77%
PERFORMANCE STATUS: KPS	
90 - 100%	65%
80%	30%
70%	5%
PERFORMANCE STATUS: ECOG	
0	33%
1	67%

Prior Computer Experience

AP QL Study in Lung Cancer - Prior Computer Experience* -

	LOW (1 – 4)	MEDIUM (5 – 7)	HIGH (8 -10)
Patients**	73%	15%	12%
Nurses	7%	43%	50%
Physicians	10%	22%	68%

* Based on a 10-point self-rated scale, where 1 = the least; 10 = the most

** Patient Educational Level: 33% Primary only; 5% University

AP QL Study in Lung Cancer (N = 243)

AP QL Study in Lung Cancer (N = 243)

	Patient's Primary Language	LCSS Language Used
CHINESE	42%	
- Simplified		22%
- Traditional		20%
Korean	35%	35%
Thai	14%	14%
English	7%	8%
Hindi	1%	1%
Malay	1%	

- Chemotherapy Factors (N = 243) -

AP QL Study in Lung Cancer - Chemotherapy Factors (N = 243) -

CHEMOTHERAPY:	
Docetaxel + Cisplatin	52%
Docetaxel + Carboplatin	30%
Docetaxel + other	2%
Docetaxel (single agent)	16%
Median Dose Given:	
Docetaxel	100 mg (60 mg / M ²)
Cisplatin	110 mg (66 mg / M ²)
Carboplatin	450 mg (271 mg / M ²)
Number of Cycles Received:	
Median	4
Mean (range)	4 (1 – 13)

Response Rate: 39% (Investigator Assessed)

Patient Data Analyzed by Study Visit and Chemotherapy Response Evaluation Status

AP QL Study in Lung Cancer
- Patient Data Analyzed by Study Visit
and Chemotherapy Response Evaluation Status -

	Baseline LCSS Evaluation	LCSS Evaluation at Baseline and at 6 Weeks	LCSS Evaluation at Baseline and at 9 Weeks
Patients with:	243	186	146
Patients with <i>Response Evaluation and</i> with:	-----	134	100

Median time for patients to complete the LCSS-QL: **4 minutes**

LCSS-QL Assessment: Completion Rate and Reasons for Non-Completion

AP QL Study in Lung Cancer LCSS-QL Assessment: - Completion Rate and Reasons for Non-Completion -

	ALL VISITS	BASELINE	VISITS 2 - 4
Number of times LCSS to be completed:	823	171	415
Patient refusal*	1.6%	0%	1.0%
Technical issues	2.2%	4.7%	2.2%
"Other"	4.5%	4.1%	3.6%
TOTAL	8.3%	8.8%	6.7%

92% of the Quality of Life assessments were completed

AP QL Study in Lung Cancer - Views of Physicians and Nurses (N = 27) -

FEASIBILITY:

Easy to use

100%

Could help save time with visit

85%

COMMUNICATION:

Enhances communication with the patient

85%

Increases awareness of QL and symptoms

78%

AP QL Study in Lung Cancer - Views of Physicians and Nurses (N = 27) -

EVALUATION AND SATISFACTION:

Identify earlier if patient is benefiting from chemotherapy

83%

Could order fewer imaging tests

75%

Increased my satisfaction with the patient visit

85%

AP QL Study in Lung Cancer - Views of Patients (N = 242 / 182) -

	AT VISIT #1	AT VISIT #3
COMMUNICATION:		
Helped me speak with my MD or RN	86%	85%
Increased my awareness of QL and lung cancer symptoms	81%	84%
Made my visit more difficult	4%	2%

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	AT VISIT #1	AT VISIT #3
Easy to use	91%	92%
Time to learn to use:		
< 3 minutes	54%	
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Acceptable to complete at each visit every 3 weeks	91%	88%

HRQL Evaluation after 3 Chemotherapy Cycles (at 9 Wks)-Assessment of All Patients Receiving Chemotherapy-(n=146 NSCLC)

**HRQL Evaluation after 3 Chemotherapy Cycles (at 9 Wks)
- Assessment of All Patients Receiving Chemotherapy -
(n = 146 NSCLC)**

	Baseline Median	Median at 9 Weeks
THORACIC SYMPTOMS:		
Cough	72%	81%
Dyspnea	76%	78%
Hemoptysis	95%	96%
GENERAL SYMPTOMS:		
Pain	80%	82%
Fatigue	69%	69%
Appetite	77%	75%
SUMMARY ITEMS:		
Symptom Distress	64%	68%
Activity Level	68%	66%
Quality of Life	59%	62%

4. Conclusions

Asian-Pacific QL Lung Cancer Trial - Conclusions -

Asian-Pacific QL Lung Trial

- Conclusions -

- 1) With Quality of Life and PROs as primary endpoints, patients:
 - Completed 92% of QL Assessments
 - Over 90% of patients found the LCSS-QL easy to use and acceptable to complete at each visit

- 2) Physicians and Nurses expressed that:
 - The LCSS-QL overall could save time with patient visits
 - The LCSS-QL could allow fewer imaging tests to be ordered
 - The QL assessment increased their satisfaction with patient visits

- 3) This computer-assisted method of QL assessment helps overcome all stated barriers for this type of evaluation in busy ambulatory settings

- 4) Prospective evaluation helped reveal QL and symptom information which could assist in clinical decision making

5. Mediafiles

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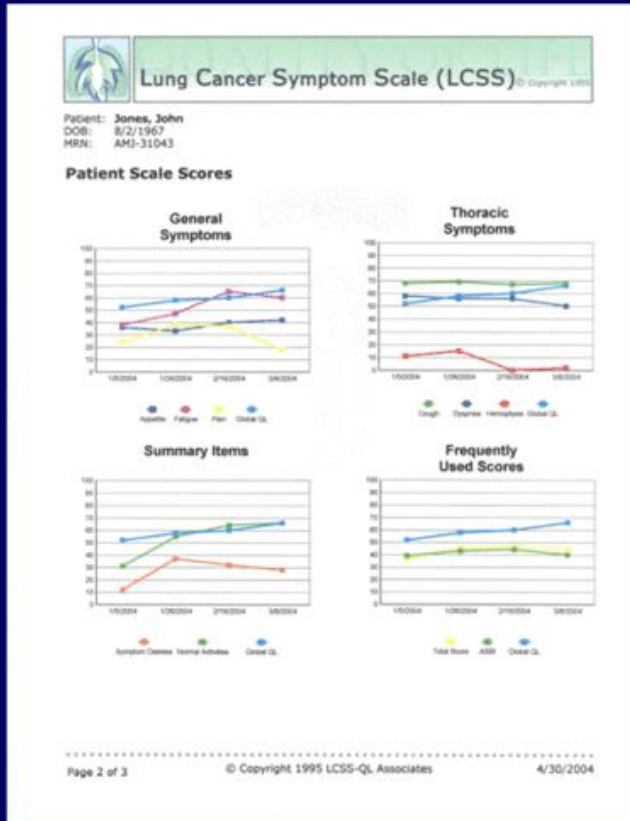
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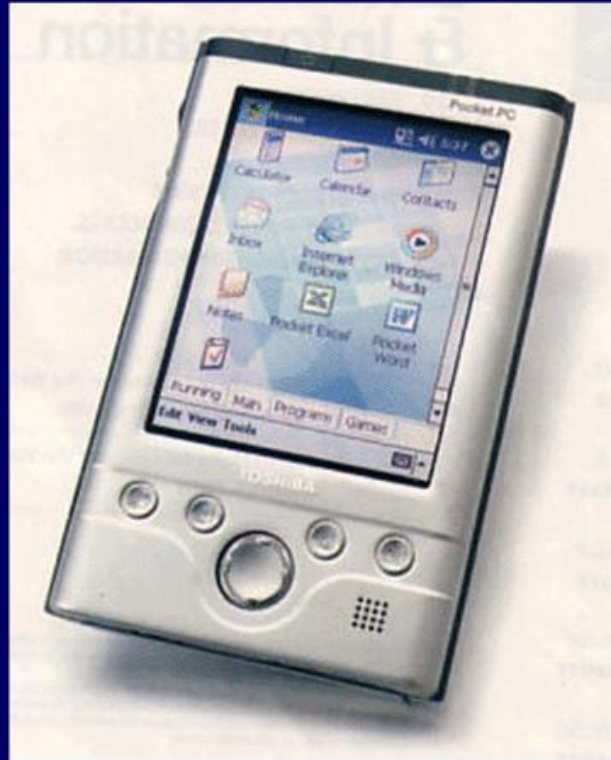
QUALITY OF LIFE IN CANCER

- Quality of Life as the Primary Trial Endpoint -


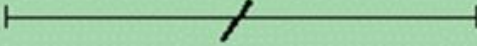
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Using a Convenient and Inexpensive Hand-Held PC

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AP QL Study in Lung Cancer

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