



**Quality of Life and Spirituality Before and After
Radiotherapy in Patients with Lung Cancer:
Preliminary Results from the Knight Cancer Institute**

Bethany T. Samuelson, MD, Erik K. Fromme, MD and **Charles R. Thomas, MD**

Background

- ✧ Quality of life (QOL) and palliative care in the treatment of cancer have been areas of increased focus in recent literature.
- ✧ A number of studies have confirmed the importance of spiritual well-being as part of the cancer experience, and several have demonstrated positive associations between improved spiritual well-being and improved QOL in cancer patients.

Background

- ✧ Balboni et al, Whitford et al, Prince-Paul, and Johnson et al all confirmed positive correlations between spiritual well-being and quality of life in cancer patients.
- ✧ Weaver and Flannelly demonstrated an association between good spiritual well-being and positive, active cognitive-coping strategies.
- ✧ McCoubrie and Davies also demonstrated an inverse correlation between good spiritual well-being and depression and anxiety.

Study Goals

- ✧ The current study aimed to document quantitative changes in QOL and spiritual well-being in lung cancer patients undergoing radiotherapy (RT)
- ✧ Additionally, we sought to describe differences from patients undergoing RT for different diagnoses.

Methods

- ✧ 406 pts receiving RT for any diagnosis between 1/1/2006 and 12/31/2008
- ✧ Participants completed the Functional Assessment of Cancer Therapy General (FACT-G) and Spirituality (Sp-12) PRO questionnaire tools prior to the first treatment and following the last.

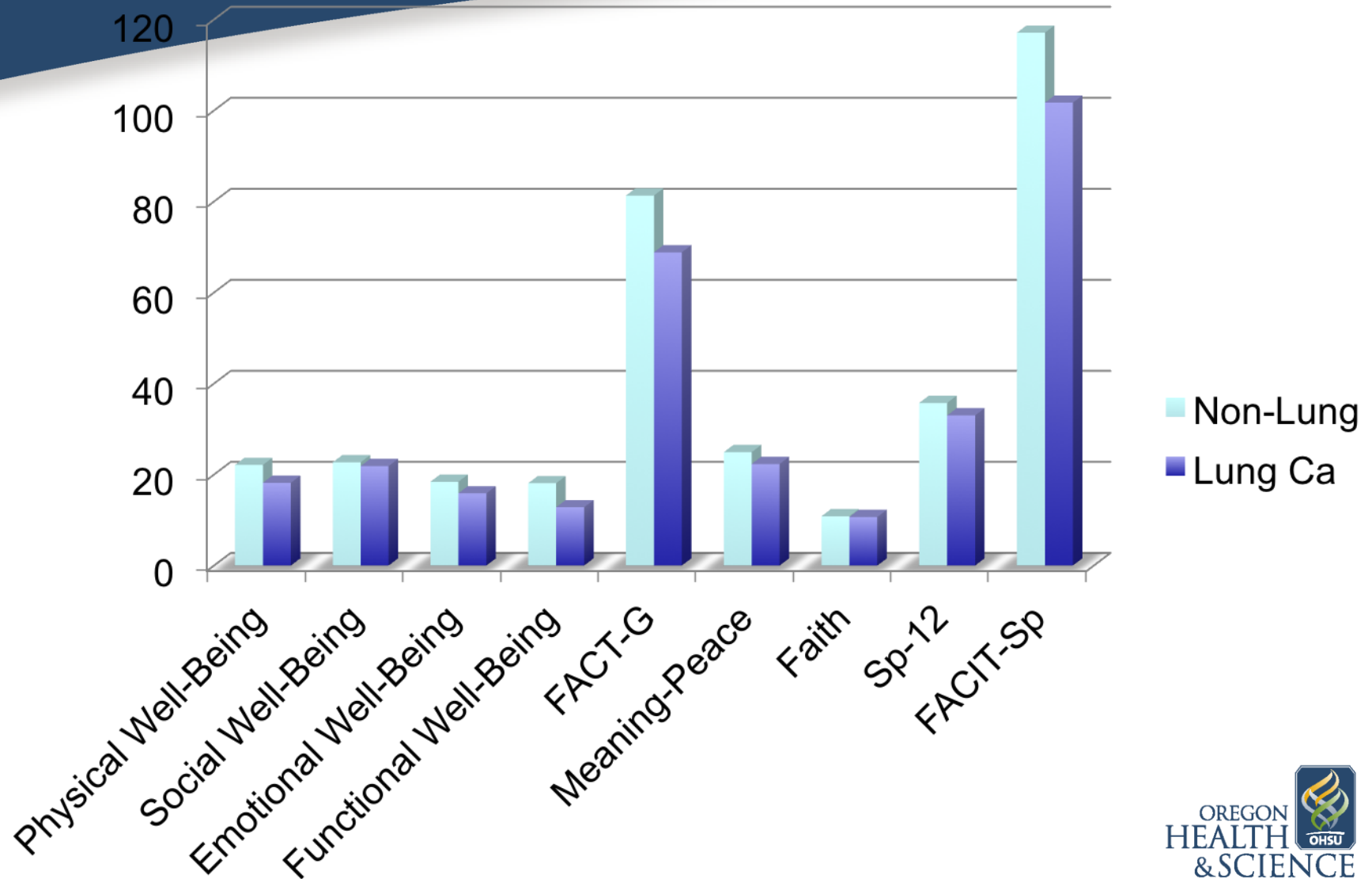
Methods

- ✧ The FACIT-Sp is a combination of the FACT-G quality of life instrument and the Sp-12 spiritual well-being instrument.
- ✧ The 108-point FACT-G is comprised of four 24 to 28-point subscales measuring physical, emotional, functional, and social domains.
- ✧ Sp-12 is a 48-point scale including two subscales, meaning-peace and faith.
- ✧ The maximum possible score for the combined FACIT-Sp is 156 (best possible quality of life).

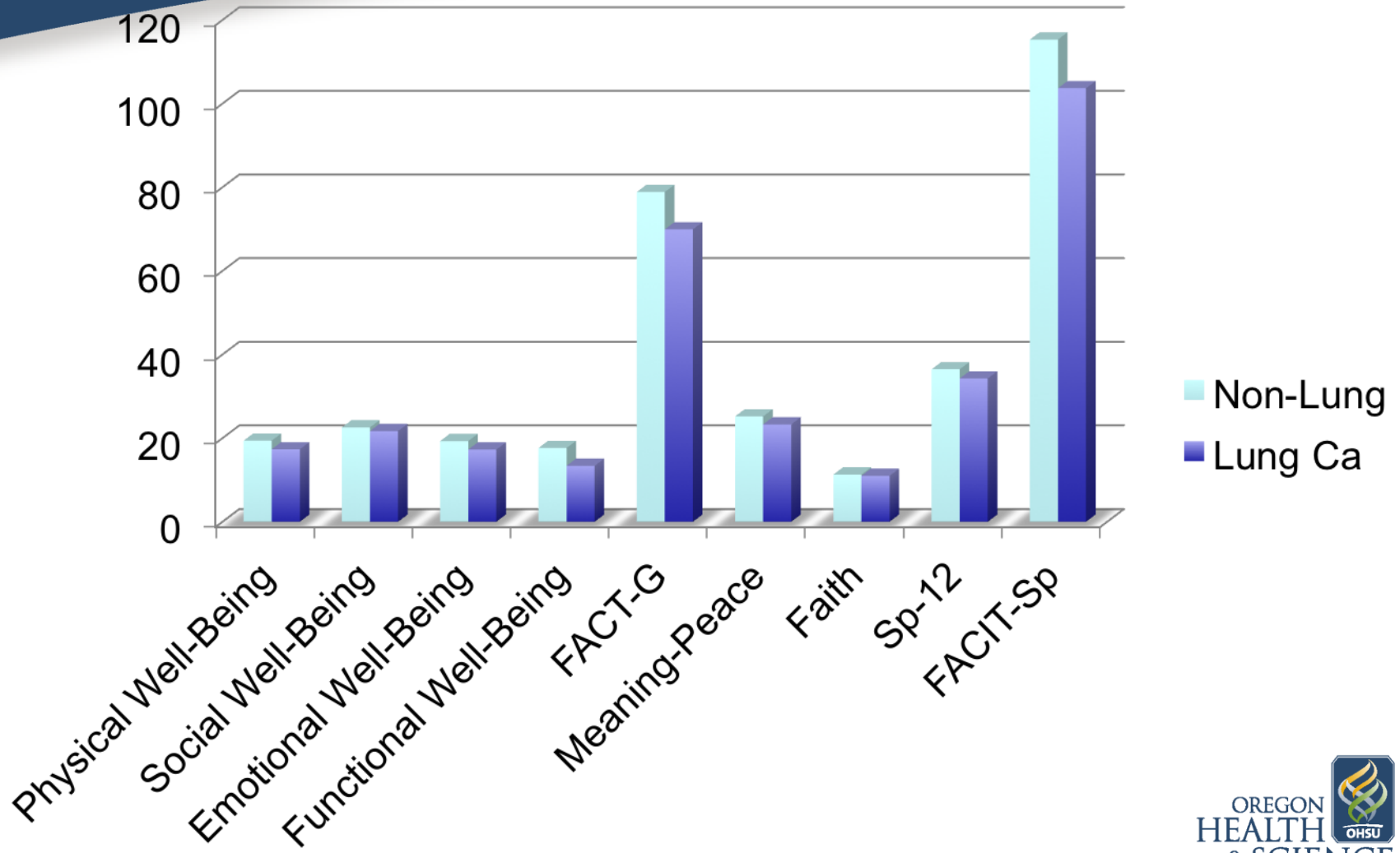
Methods

- ✧ Pre- and immediately post-RT course scores were compared using student *t*-tests with Bonferroni correction for multiple comparisons (8 comparisons, $\alpha = .00556$).
- ✧ Distributions of responses as reported by lung cancer and non-lung cancer patients were compared utilizing chi-square analysis.

Results: Pre-Treatment



Results: Post-Treatment



Results

	Lung Cancer	Non-Lung Cancer
PWB	↓	↓
SWB	↓	↓
EWB	↑	↑
FWB	↑	↓
FACT-G	↑	↓
Meaning-Peace	↑	↑
Faith	↑	↑
Sp-12	↑	↑
FACIT-Sp	↑	↓

Results

- ✧ Additionally, a weak but statistically significant positive correlation was identified between having lung cancer and change in overall QOL ($r= 0.126$, $p=0.012$)
- ✧ This correlation remained consistent when controlling for palliative vs definitive goals of treatment ($r=0.110$, $p=0.029$).

Conclusions

- ✧ At the time of presentation for radiotherapy, lung cancer patients appear to have worse physical, emotional, functional and spiritual well-being than patients undergoing therapy for other diagnoses.
- ✧ Some of these differences, particularly those in spiritual well-being, appear to equalize over the course of treatment.
- ✧ Unlike lung cancer patients, non-lung cancer patients did not demonstrate a significant worsening of overall QOL over the course of treatment, in keeping with previous literature indicating an important, positive link between spiritual well-being and overall QOL.
- ✧ This may suggest a missed opportunity to improve overall QOL in patients with diseases with less mortality by focusing on supporting their spiritual well-being.

Acknowledgments

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- ✧ Thanks to the OHSU Radiation Medicine patients who so patiently completed these questionnaires so that we might learn to better support those that followed them.