

# P-15

## Health Related Quality of Life (HRQOL) in Neuroendocrine Tumor - A Systematic Review

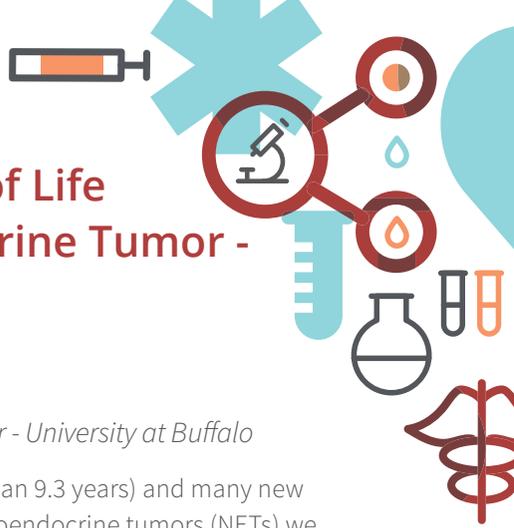
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**BACKGROUND:** Given the long survival (median 9.3 years) and many new therapies approved for the treatment of neuroendocrine tumors (NETs) we sought to evaluate the impact of currently used therapies on HRQoL. The intent was to identify the common tools used, impact of treatment on patient reported outcomes and assist providers and patients to make appropriate treatment choices.

**METHODS:** We did a thorough review of the literature, utilizing PubMed, The Cochrane Library and EMBASE, utilizing relevant keywords. Publications that were letters, editorials, narrative reviews, case reports, and studies not in English were excluded from our study.

**RESULTS:** Of the 2,375 records found, only 63 met our inclusion criteria. The commonly used QOL instruments used were EORTC QLQ-C30, QLQ GI.NET-21 and FACT-G. HRQoL was assessed in all pivotal trials that led to approval of octreotide, somatuline, everolimus, telotristat, peptide receptor radionucleotide therapy (PRRT) and sunitinib in NET patients. These therapies showed no worsening in QOL compared to control arms (see table 1), while only PRRT showed benefit in several elements of HRQoL (especially in physical functioning, role functioning, fatigue, pain, diarrhea, disease related worries and body image). The trial examining sunitinib versus placebo showed no change in QOL except for diarrhea especially in sunitinib arm. The tool used in the TELESTAR study was developed for the unique indication of carcinoid diarrhea and 67% patients reported improvement with diarrhea control compared to 33% in the control arm.



**CONCLUSION:** In addition to survival outcomes, patient centered outcomes are a key element in making appropriate treatment choices. HRQoL data should be readily provided to patients during their pretherapy counseling along with toxicity information, to assist patients in informed decision making. There is a paucity of data when patients are off treatment and impact of access to care, age and socioeconomic and demographic factors in decision making are needed.

**Table 1. HRQoL in currently used FDA approved, and their assessment to their adverse effects comparison to that seen with the control arm.**

FDA approved therapies	HRQoL tool used	Patient population studied	HRQoL in comparison to control arm
Octreotide vs. Placebo	EORTC QLQ-C30	GI and unknown primary NETs	Comparable in both arms
Somatuline vs Placebo	EORTC QLQ-C30, QLQ-GI.NET21	GI, pancreatic NETs and unknown primary	Comparable in both arms
Everolimus vs Placebo	FACT-G	All NETs	Comparable in both arms
Sunitinib vs Placebo	EORTC QLQ-C30	Pancreatic NETs	Maintained in both arms, except diarrhea
PRRT vs Octreotide	EORTC QLQ-C30, QLQ-GI.NET21	Midgut NETs	Improved in several aspects on study arm
Telotristat vs Placebo	Diarrhea satisfaction self-report	Carcinoid syndrome with diarrhea	Improved in 2/3 of study arm compared to 1/3 in control arm
Urban County	1.06 (0.91-1.24)	1.18 (0.89-1.60)	0.93 (0.69-1.27)