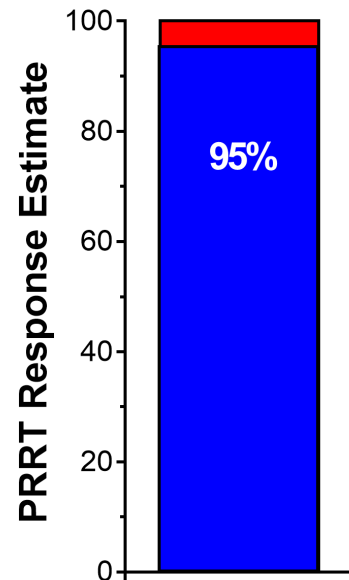
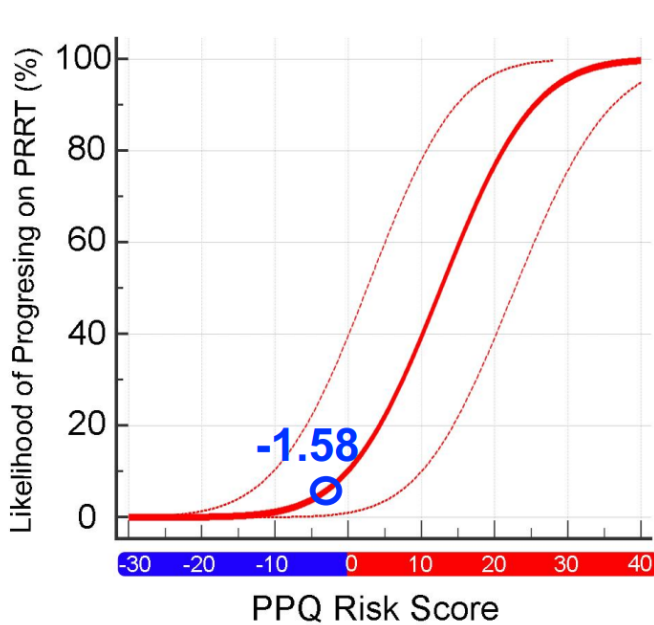


Patient Information		Sample Information		Provider Information
NAME:		SAMPLE NUMBER:	LL3000001	REFERRING PHYSICIAN:
DOB:		DATE COLLECTED:		MEDICAL LICENSING NUMBER:
PHONE:		DATE RECEIVED:		PRACTICE:
PDx #:	LL0000019	DATE REPORTED:		
ICD 10:		TEST:	PPQ	

## PPQ Results

8-GENE PRRT SCORE: <b>9.03</b>	PPQ RISK SCORE: <b>-1.58</b>	PERSONALIZED PROBABILITY OF PRRT EFFICACY: <b>95%</b>
TUMOR GRADE: <b>Grade2</b>		



**PRRT - RESPONSE PREDICTION: RESPONDER (95%)**

The PPQ/PRRedictor was developed to predict response to peptide receptor radionuclide therapy (PRRT) in bronchopulmonary and gastroenteropancreatic neuroendocrine tumors. It has two outputs based on the tumor grade and expression of 8 gene panel involved in metabolism and growth factor signaling. Patients are classified as either a "Responder" (someone who will respond to PRRT and experience disease stabilization and a longer time to progression - usually >18 months after the end of PRRT) or "Non-Responder" (someone who will have a shorter time until disease progresses - usually within 12 months after the start of PRRT).

Comments:

## PPQ Methodology and Score Calculation

The PPQ is based on an algorithm that combines normalized gene expression from eight target genes (amplified by PCR from peripheral blood) and the histological grade of the tumor [1-4]. The algorithm was tested and developed in more than 500 patients treated with PRRT. It has a high sensitivity (>90%) and specificity (>90%) for predicting response to PRRT [1-2].

## Laboratory Developed Test (LDT)

This test was developed and its performance characteristics determined by Wren Laboratories LLC, which is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88 ) and is qualified to perform high-complexity clinical laboratory testing. This LDT has not been approved by the European Medical Associate (EMA) or the US Food and Drug Administration (FDA).

## References

1. Bodei L et al. Eur J Nucl Med Mol Imaging. 2016;43(5):839-851. doi: 10.1007/s00259-015-3250-z.
2. Bodei L et al. Eur J Nucl Med Mol Imaging. 2018;45(7):1155-1169. doi: 10.1007/s00259-018-3967-6.
3. Kidd M et al. Nat Rev Gastroenterol Hepatol. 2017;14(6):331-332. doi: 10.1038/nrgastro.2017.26.
4. Bodei L et al. J Thorac Dis. 2017;9(Suppl 15):S1511-S1523. doi: 10.21037/jtd.2017.09.82.