Improving the Impact of the QIBA CT Small Lung Nodule Profile

Panel Discussion

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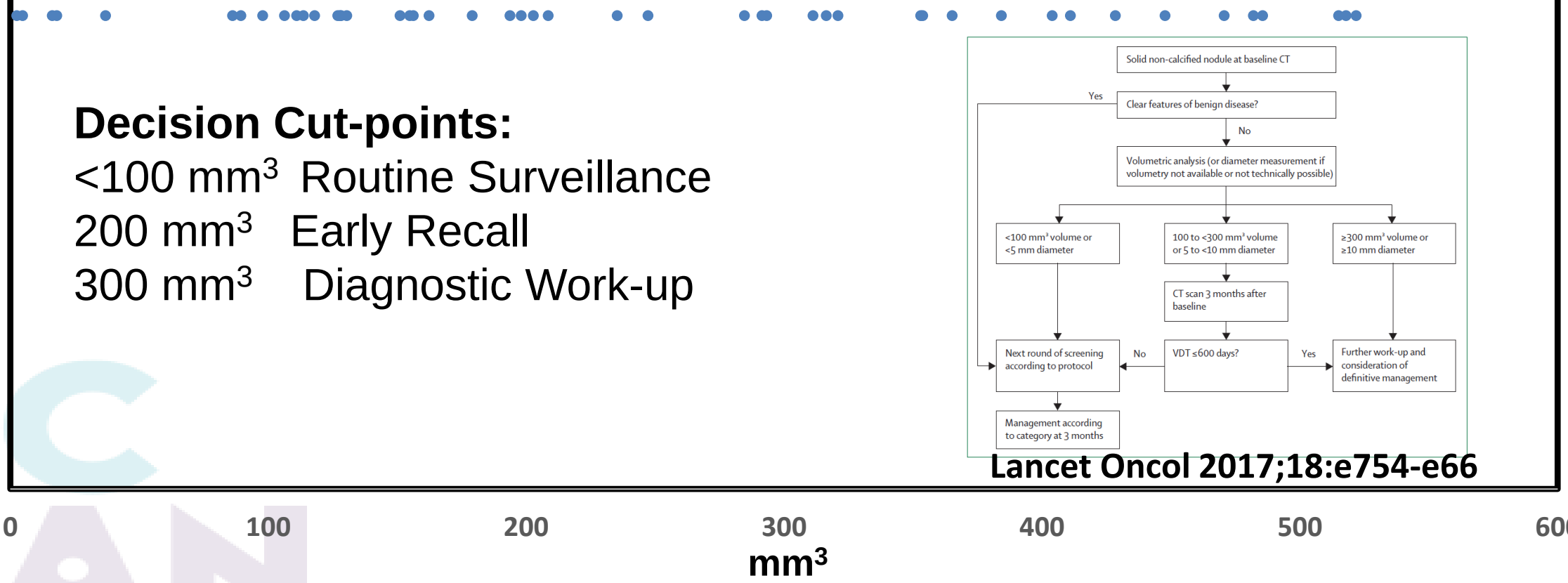
Impact Of Nodule Measurement Accuracy

Volume of Malignant Nodules in PanCan Baseline LDCT (N=121)
24.8% < 300 mm³ , 38.8% < 524 (<10 mm diameter)



Decision Cut-points:

<100 mm³ Routine Surveillance

200 mm³ Early Recall

300 mm³ Diagnostic Work-up

Lancet Oncol 2017;18:e754-e66

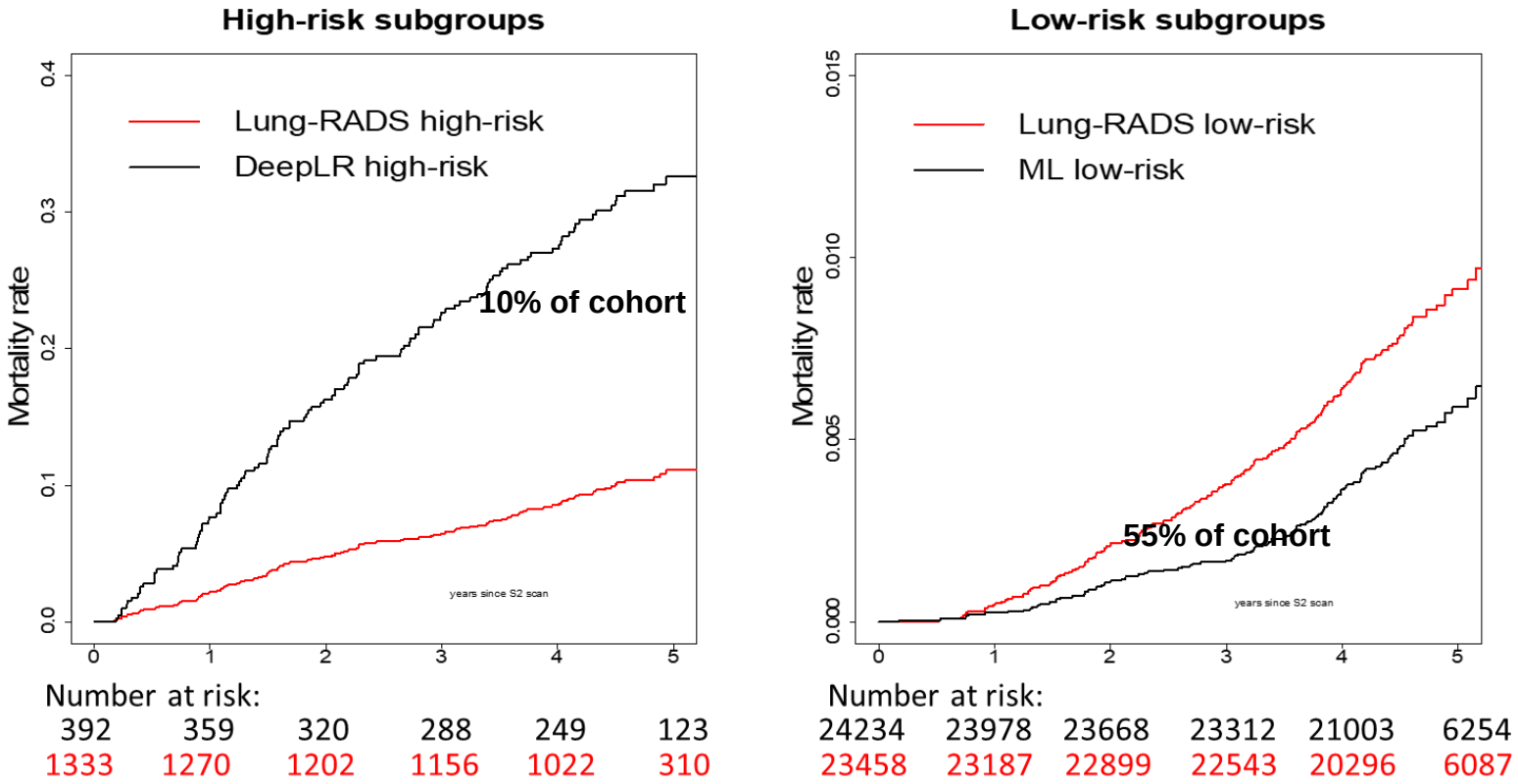
Improve Impact Of QIBA CT Small Lung Nodule Profile

Lung-RADS	EU-NELSON	CPAC (Canadian Guideline)
Growth Criteria Mean Diameter increase ≥1.5 mm Volumetric techniques: Use QIBA Lung Nodule Profile Calculator (v0.2) (http://services.accumetra.com/ NoduleCalculator.html)	**Growth Criteria** For nodule volume 100 - 300mm^3, Volume Doubling Time <400 days; VDT 400-600 days (possible growth) Volume ≥300mm^3 suspicious of malignancy	• Recommends screening sites conform with the QIBA CT Small Lung Nodule Profile using a standardized phantom • Regular CT phantom testing is mandatory for quality control of CT data acquisition, benchmarking of CT software post processing and data analysis. • Significance of changes in diameter or volume should take into account the coefficient of variation in the measurement and the software used.

Canadian Journal of Respiratory, Critical Care, and Sleep Medicine, DOI: 10.1080/24745332.2020.1819175

Predicting Lung Cancer Mortality Risk With Deep Learning

Can More Precise Measurement Personalize Follow-up Time More Accurately?



Peng Huang et al. Lancet Digital Health October 17, 2019

Head To Head Comparison Using Oncologic Quality Indicators

- Appropriateness of early recall CT, PET/CT
- Biopsy rate
- Number of invasive procedures for benign disease per 1000 people
- Cancer detection rate
- Missed cancers
- Interval cancers