

Resource Summary Report

Generated by [dkNET](#) on Sep 13, 2026

CANARY Segmentation of Lung Adenocarcinoma

DOI:10.17504/protocols.io.mrcc52w

Type: Protocol

Proper Citation

Erica C. Nakajima, Ronald Karwoski, Fabien Maldonado, Srinivasan Rajagopalan, Tucker F. Johnson, Michael P. Frankland 2018. CANARY Segmentation of Lung Adenocarcinoma. protocols.io dx.doi.org/10.17504/protocols.io.mrcc52w

Protocol Information

URL: <https://dx.doi.org/10.17504/protocols.io.mrcc52w>

Authors: Erica C. Nakajima, Ronald Karwoski, Fabien Maldonado, Srinivasan Rajagopalan, Tucker F. Johnson, Michael P. Frankland

Summary: Computer-Aided Nodule Assessment and Risk Yield (CANARY) is a novel computed tomography (CT) tool developed at Mayo Clinic (Rochester, MN) that characterizes early lung adenocarcinoma by detecting nine distinct voxel classes, representing a spectrum of lepidic to invasive growth, within an adenocarcinoma. CANARY characterization has been shown to correlate with ADC histology and patient outcomes. This protocol provides basic instructions for segmentation of lung adenocarcinoma on CT imaging. CANARY has been validated in lung adenocarcinomas less than 3cm in diameter

Associated Publications: Nakajima EC, Frankland MP, Johnson TF, Antic SL, Chen H, Chen S, Karwoski RA, Walker R, Landman BA, Clay RD, Bartholmai BJ, Rajagopalan S, Peikert T, Massion PP, Maldonado F (2018) Assessing the inter-observer variability of Computer-Aided Nodule Assessment and Risk Yield (CANARY) to characterize lung adenocarcinomas. PLoS ONE 13(6): e0198118. doi: [10.1371/journal.pone.0198118](https://doi.org/10.1371/journal.pone.0198118)

Affiliations: Vanderbilt University Medical Center, , , , ,

External URL: <https://doi.org/10.1371/journal.pone.0198118>

Version: 1

Publication Date: 2018

Proper Citation: Erica C. Nakajima, Ronald Karwoski, Fabien Maldonado, Srinivasan Rajagopalan, Tucker F. Johnson, Michael P. Frankland 2018. CANARY Segmentation of Lung Adenocarcinoma. protocols.io dx.doi.org/10.17504/protocols.io.mrcc52w

Record Creation Time: 20210329T220521+0000

Record Last Update: 20210329T220852+0000

Data and Source Information

Source: