

## Accepted Manuscript

ADC at 3.0T as a noninvasive biomarker for preoperative prediction of Ki67 expression in invasive ductal carcinoma of breast

Lu Shen, Guoxing Zhou, Tong Tong, Fei Tang, Yi Lin, Jie Zhou, Yibin Wang, Genlin Zong, Lei Zhang



PII: S0899-7071(18)30041-X  
DOI: doi:[10.1016/j.clinimag.2018.02.010](https://doi.org/10.1016/j.clinimag.2018.02.010)  
Reference: JCT 8398

To appear in:

Received date: 4 June 2017  
Revised date: 24 January 2018  
Accepted date: 12 February 2018

Please cite this article as: Lu Shen, Guoxing Zhou, Tong Tong, Fei Tang, Yi Lin, Jie Zhou, Yibin Wang, Genlin Zong, Lei Zhang , ADC at 3.0T as a noninvasive biomarker for preoperative prediction of Ki67 expression in invasive ductal carcinoma of breast. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Jct(2017), doi:[10.1016/j.clinimag.2018.02.010](https://doi.org/10.1016/j.clinimag.2018.02.010)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

**ADC at 3.0 T as a noninvasive biomarker for preoperative prediction of Ki67 expression in invasive ductal carcinoma of breast**

Lu Shen<sup>1,\*</sup>, Guoxing Zhou<sup>1,\*</sup>, Tong Tong<sup>2</sup>, Fei Tang<sup>1</sup>, Yi Lin<sup>1</sup>, Jie Zhou<sup>1</sup>, Yibin Wang<sup>1</sup>, Genlin Zong<sup>1</sup>, Lei Zhang<sup>1,#</sup>

<sup>1</sup>Department of Radiology, East Hospital, School of Medicine, Tongji University, Shanghai, 200120, China;

<sup>2</sup>Department of Radiology, Shanghai Cancer Center, School of Medicine, Fudan University, Shanghai, 200032, China

\*Co-first author: Lu Shen and Guoxing Zhou contributed equally to this work.

# Corresponding author: Lei Zhang.

Email: zhanglei430217@sina.com; Telephone: +86-21-38804518.

Corresponding address: Department of Radiology, East Hospital, School of Medicine, Tongji University, No.150 Jimo Road, Shanghai 200120, China.

**Abstract**

**Purpose:** To investigate the role of apparent diffusion coefficient (ADC) as an imaging biomarker for invasive ductal carcinoma (IDC) in the breast.

**Methods:** Seventy-one patients undergoing 3.0 Tesla DWI were retrospectively enrolled. Correlations between the ADC values and prognostic factors were evaluated.

**Results:** Multivariate regression analyses showed that Ki67 expression and molecular subtype were independently associated with the ADC. Discriminant analysis excluded the ADC as a good biomarker for subtype, but the mean ADC significantly distinguished Ki67-positive (low ADC) from Ki67-negative (high ADC) lesions, as observed in the in ROC curves, with a diagnostic sensitivity of 1.00 and a cut-off value of  $0.97 \times 10^{-3} \text{ mm}^2/\text{s}$ .

Download English Version:

<https://daneshyari.com/en/article/8821269>

Download Persian Version:

<https://daneshyari.com/article/8821269>

[Daneshyari.com](https://daneshyari.com)