Anti-cytokeratin CAM5.2 Recognized CK8 Mainly, but not CK18: Comment on “Early Assessment of Axillary Response with ¹⁸F-FDG PET/CT During Neoadjuvant Chemotherapy in Stage II–III Breast Cancer: Implications for Surgical Management of the Axilla. *Annals of Surgical Oncology* doi: 10.1245/s10434-013-2902-0 (2013)”

Wan-Ru Chao, MD^{1,2} and Chih-Ping Han, MD, PhD^{3,4,5}

¹Institute of Medicine, Chung-Shan Medical University, Taichung, Taiwan; ²Department of Pathology, Chung-Shan Medical University and Chung Shan Medical University Hospital, Taichung, Taiwan; ³School of Medicine, Chung-Shan Medical University Hospital, Taichung, Taiwan; ⁴Department of Obstetrics and Gynecology, Chung-Shan Medical University Hospital, Taichung, Taiwan; ⁵Clinical Trial Center, Chung-Shan Medical University Hospital, Taichung, Taiwan

TO THE EDITORS:

We read with great interest the contribution by Dr. BB Koolen and colleagues, regarding their study entitled “Early Assessment of Axillary Response with ¹⁸F-FDG PET/CT During Neoadjuvant Chemotherapy in Stage II–III Breast Cancer: Implications for Surgical Management of the Axilla.”¹ The authors implemented an outstanding study and presented a good report. However, this article contains an incorrect message in the “Response Assessment of Axillary Nodes” section of the “Methods” paragraph that I believe, may misguide the readers. The authors may have inadvertently stated that “Lymph nodes were evaluated at one level and stained with hematoxylin and CAM5.2, an antibody detecting cytokeratin 8/18.”¹

Occasionally, anti-cytokeratin CAM5.2 has been mistakenly believed to recognize cytokeratins 8 and 18, since previous results by Makin et al.² are attributed to breakdown products of cytokeratin 8, giving smaller molecular weight fractions on immunoblots. However, Becton Dickinson Biosciences has revised the data sheet for CAM5.2 (B.D.) since 1997. It is now well known that CAM5.2 is

specific for cytokeratin 8 and to a lesser extent for the closely related cytokeratin 7, but shows no reactivity with 18.³ Accordingly, we would like to clarify the critical point that monoclonal antibody CAM5.2 recognized mainly CK8, but not CK18.

ACKNOWLEDGMENTS This work was supported in parts by grants from Department of Health (DOH102-FDA-43002-H) and Chung Shan Medical University Hospital (CSH-2011-C-001), Taiwan.

CONFLICT OF INTEREST The author declares no conflict of interests.

REFERENCES

1. Koolen BB, Olmos RA, Wesseling J, Vogel WV, Vincent AD, Gilhuijs KG, et al. Early assessment of axillary response with ¹⁸F-FDG PET/CT during neoadjuvant chemotherapy in stage II–III breast cancer: implications for surgical management of the axilla. *Ann Surg Oncol*. 2013;20:2227–35.
2. Makin CA, Bobrow LG, Bodmer WF. Monoclonal antibody to cytokeratin for use in routine histopathology. *J Clin Pathol*. 1984;37:975–83.
3. BD Biosciences: anti-cytokeratin (CAM 5.2). Specification sheet. http://www.bdbiosciences.com/external_files/is/doc/tds/Datasheets_RUO/live/web_enabled/23-1336-09-347653-347204-349205-DS-ruo.pdf. Accessed 17 Jun 2013.