MDM2 Oncogene Copy Number Alterations in Chronic Lymphocytic Leukemia

Kronik Lenfositik Lösemide MDM2 Onkogen Kopya Sayısı Değişiklikleri

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To the Editor,

We read "Investigation of *MDM2* oncogene copy number alterations in cases of chronic lymphocytic leukemia" (CLL) with great interest [1]. Darbaş et al. [1] stated: "In previous studies, *MDM2* overexpression was examined at mRNA and protein levels, but amplification of the *MDM2* gene at DNA level in CLL patients has been examined for the first time in our study" [1]. Indeed, *MDM2* overexpression is an important pathological phenomenon seen in CLL [2]. The investigation of *MDM2* overexpression can be useful in the diagnostic and therapeutic management of the patient. Nevertheless, we would like to point out that the present report by Darbaş et al. [1] is not the first report studying amplification of the *MDM2* gene at DNA level in CLL patients. A previous report by Watanabe et al. [3] already investigated this issue, although in those case the results were negative.

Keywords: *MDM2*, Oncogene, Copy number, Chronic lymphocytic leukemia

Anahtar Sözcükler: *MDM2*, Onkogen, Kopya sayısı, Kronik lenfositik lösemi

Conflict of Interest: The authors of this paper have no conflicts of interest, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included.

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	DOI: 10.4274/tjh.galenos.2019.2019.0179

Reply from the Authors

To the Editor,

We would like to thank the authors for showing interest in our letter, which was titled "Investigation of *MDM2* oncogene copy number alterations in cases of chronic lymphocytic leukemia" [1]. The authors have shown two previously published articles related to overexpression of *MDM2* in CLL patients. One of them was written by Watanabe et al. [2]; they performed Southern blot analysis to examine whether *MDM2* was amplified in 23 B-CLL specimens and found that none of the patients showed amplification. In the other study, Bixby et al. [3] reported that they had found three copies of the *MDM2* gene in 37 of 178 CLL patients using 50K SNP-array technology. After screening the literature in detail, we found two additional studies. Bueso-Ramos et al. [4] reported 5 CLL patients not showing amplification using the Southern blot method and Huang et al. [5] reported 4 of 11 patients with CLL showing amplification of the *MDM2* gene using the Southern blot technique. Considering these four studies, amplification of the *MDM2* gene

at DNA level in CLL patients had been previously examined by Southern blot and array techniques, but we used the FISH technique in our study to demonstrate *MDM2* amplification in CLL patients.

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