Over-expression of HER2 in Indian patients with gastric cancer

Prachi S. Patil • Shaesta A. Mehta • K. M. Mohandas

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Sir:

HER2 expression is a predictive and prognostic biomarker in gastric cancer (GC) and is approved and currently used to direct treatment of advanced GC [1]. The prevalence of HER2 over-expression in Indian subjects with GC is unknown. We read with interest the study by Sekaran et al. who have recently reported a high frequency of HER2 expression in Indian subjects with GC [2]. However, we should be cautious in extrapolating their study results to the general Indian population.

In an ongoing multinational clinical trial evaluating a tyrosine kinase inhibitor in advanced GC, only 3 of the 43 (7 %) consenting subjects at our center over-expressed HER2 on immunohistochemistry and fluorescent in situ hybridization which was done at a central laboratory. Furthermore, at nine other centers across India which participated in this study, HER2 positivity was consistently around 10 % which resulted in slower than anticipated patient accrual. Following the approval of trastuzumab for GC, we have tested another 19 subjects with advanced GC and found only three (15 %) of these to be over-expressing HER2 (unpublished data from hospital database).

A systematic review of 41 studies reported a median rate of 18 % (range, 4–53 %) of HER2 over-expression in GC tissue [3]. Sekaran et al. do not explain the reason for high rates (44.2 %) in their study [2]. One possibility is selection bias as almost 50 % subjects in their study had stage I or II GC while only 8 % of subjects had stage IV disease. This type of stage distribution is quite different to what is reported

from various parts of the world including from India [4]. A small percentage of advanced GC in the study population may also limit the clinical applicability of the data, given the fact that the current indication for HER2 testing lies in the management of subjects with inoperable, metastatic GC and this population is least represented in the present study sample.

A larger study which has an adequate representation of subjects with different stages and sites of GC is required to give us a more accurate estimate of the frequency of HER2 positivity in GC.

References

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P. S. Patil (✉) • S. A. Mehta • K. M. Mohandas
Department of Digestive Diseases and Clinical Nutrition,
Tata Memorial Hospital,
Dr. E Borges Road, Parel,
Mumbai 400 012, India
e-mail: prachipatil@gmail.com